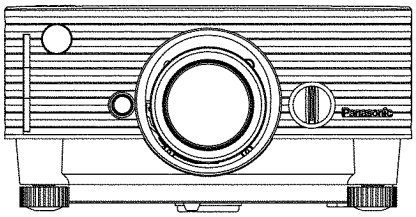
ORDER NO. VED0507366C0
D10

Service Manual

DLP™ Based Projector



PT-D3500U
PT-D3500E

Panasonic

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The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service manual.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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CAUTION
Lithium Battery
Risk of explosion if battery is replaced by an incorrect type. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
(See also Operating Instructions.)

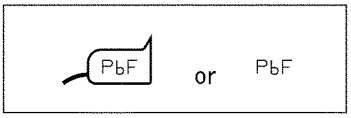
Precaution
If using of this projector at high elevations (above 1 400 m), set FAN CONTROL1 to HIGHLAND.
Failure to observe this may cause malfunctions.
Never use this projector at an elevation of 2 700 m or higher.
Using this projector at high elevations, consult your dealer or Authorized Service Center about preparations.

About lead free solder (PbF)

This projector is using the P.C.Board which applies lead free solder. The use of lead free solder is recommended from the standpoint of antipollution for the global environment in service.
Notes:

- Lead free solder: Sn-Ag-Cu (tin, silver and copper) has a higher melting point (approx. 217℃) than standard solder. Typically, the melting point is 30℃ to 40℃ higher. When servicing, use a high temperature soldering iron with temperature limitation function and set it to 370±10℃.
- Be precautions about lead free solder: Sn-Ag-Cu (tin, silver and copper) will tend to splash when heated too high (approx. 600℃ or higher).
- Use lead free solder for the P.C.Board (specified on it as "PbF") which uses lead free solder. (When you unavoidably use lead solder, use lead solder after removing lead free solder. Or be sure to heat the lead free solder until it melts completely, before applying lead solder.)
- After soldering to double layered P.C.Boards, check the component side for excess solder which may flow onto the opposite side.

About the identification of the lead free solder P.C.Board
For the P.C.Board which applies lead free solder, the symbol as shown in the figure below is printed or stamped on the surface or the back of P.C.Board.



For US

IMPORTANT SAFETY NOTICE

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC BROADCAST & TELEVISION SYSTEMS COMPANY.

WARNING:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any unauthorized changes or modifications to this equipment will void the users authority to operate.

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1 Safety Precautions

1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- Use correctly the supplied power cord and must ground it.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.

   Be sure to use a voltmeter having the performance described in Table 1.

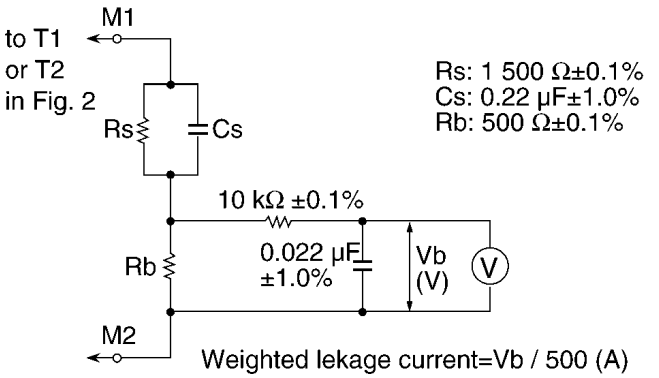


Fig. 1

	Performance
Voltmeter (rms reading)	Accuracy: ≤ 2% Input resistance: ≥ 1 MΩ Input capacitance: ≤ 200 pF Frequency range: 15 Hz to 1 MHz

Table 1

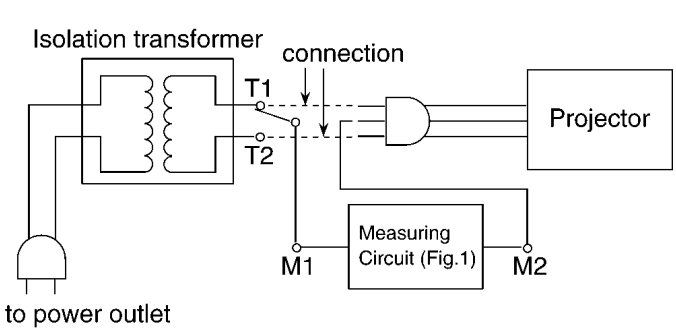


Fig. 2

2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75 mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

2 Specifications

Model No.	PT-D3500U/E
Power supply	AC 120 V, 50 Hz/60 Hz (PT-D3500U) AC 220 V-240 V, 50 Hz/60 Hz (PT-D3500E)
Power consumption	400 W (about 10 W in standby without fan running): (PT-D3500U) 400 W (about 15 W in standby without fan running): (PT-D3500E)
DLP™ panel Panel size Display system Number of pixels	 0.7 inch (aspect ratio 4:3) DMD™ element, DLP type 786 432 pixels (1 024 x 768 dots)
Lens Powered zoom Powered focus control	 1 to 1.32 F=1.7 to 2.0 f=25.6 to 33.8
Projection lamp	1 bulb x 300 W UHM lamp
Optical output	3 500 lm *1
Applicable scanning frequency For video signal (S-video included) For RGB signal For DVI-D signal For YPBPR signal	 Horizontally 15.73 kHz/15.63 kHz, vertically 59.94 Hz/50 Hz Horizontally 15 kHz-91 kHz, vertically 50 kHz-85 kHz, Panasonic Intelligent Auto Scanning (PIAS) system Dot clock frequency Less than 108 MHz Compliant with HDCP*2 EDID1: 480p, 576p, 720/60p, 1080/60i, 1080/50i EDID2: VGA480/60, SVGA/60, XGA/60, XGA/70, XGA/85, SXGA/60 [480i], horizontally 15.73 kHz, vertically 59.94 Hz [480p], horizontally 31.5 kHz, vertically 59.94 Hz [576i], horizontally 15.63 kHz, vertically 50 Hz [576p], horizontally 31.25 kHz, vertically 50 Hz [720/60p], horizontally 45 kHz, vertically 60 Hz [1035/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/50i], horizontally 28.13 kHz, vertically 50 Hz ・HD/SYNC, VD terminals are not compliant with 3 value composite SYNC.
Color system	7 standards (NTSC/NTSC4.43/PAL/PAN-N/PAL-M/SECAM/PAL60)
Screen size	50 inch - 600 inch
Screen aspect ratio	4:3
Projection scheme	Menu-selectable from front/rear/ceiling mount, and floor standing
Contrast ratio	1 600:1 (when "HIGH" is selected as the "CONTRAST MODE" setting)
Interface ports RGB1 input terminal	 1 set, BNC x 5 [For YPBPR input] Y: 1.0 V[p-p] synchronization signal included, PBPR: 0.7 V[p-p] 75 Ω [For RGB input] 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted ・However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.

*1 Value when accessory is used, "PICTURE MODE" is set at "DYNAMIC" and zoom lens is in the wide lens position.
*2 HDCP(High-band width Digital Content Protection)
HDCP is a digital video signal encryption system developed with the aim of protecting digital content.

Model No.	PT-D3500U/E
Interface ports	
RGB2 input terminal	1 set of high-density, D-sub 15p (female) [For YP_BP_R input] Y: 1.0 V [p-p] synchronization signal included, P_BP_R: 0.7 V[p-p] 75 Ω [For RGB input] 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted ・However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.
Video input terminal	1 set RCA 1.0 V[p-p] 75Ω
S-video input terminal	1 set Mini DIN 4p Y 1.0 V[p-p] C 0.286 V[p-p] 75 ΩCompliant with S1 signals
Serial input terminal	D-sub 9-pin (female), RS232C compliant Used for personal computer control
Remote1 input terminal	1 set for M3 stereo mini jack Wired remote control
Remote2 terminal	D-sub 9-pin (female) Used for external control
DVI-D terminal	DVI-D 24-pin
LAN terminal	RJ-45 Compliant with PJLink™
Audio input terminal	1 set of M3 stereo mini jacks (L and R) for RGB1/ RGB2/DVI input 1 set of RCA (L and R) for Video/S-Video input
Audio output terminal	1 set of M3 stereo mini jack (L and R)
Length of power supply cord	3.0 m
Cabinet	Molded resin
Outside dimensions	Width: 332 mm; Height : 168 mm; Depth: 425 mm
Mass	7.9 kg
Working environment condition	*3 Ambient temperature: 0 to 40°C Ambient humidity: 20 to 80% (no condensation)
Remote control	
Power source	3 V DC (two AAA dry cells)
Operation range	approx. 7 m (in front of beam receiver)
Mass	95g (including dry cells)
Outside dimensions	Width: 45 mm, Thickness: 23 mm , Depth: 145 mm
Option	
Hanging attachment (For high ceiling)	: ET-PKD35
Hanging attachment (For low ceiling)	: ET-PKD35S
Projection lens	: ET-DLE100, ET-DLE200, ET-DLE300, ET-DLE400, ET-DLE050
Wireless mouse receiver	: ET-RMRC2
Replacement lamp unit	: ET-LAD35 (single bulb)
Long life lamp unit	: ET-LAD35L (single bulb)

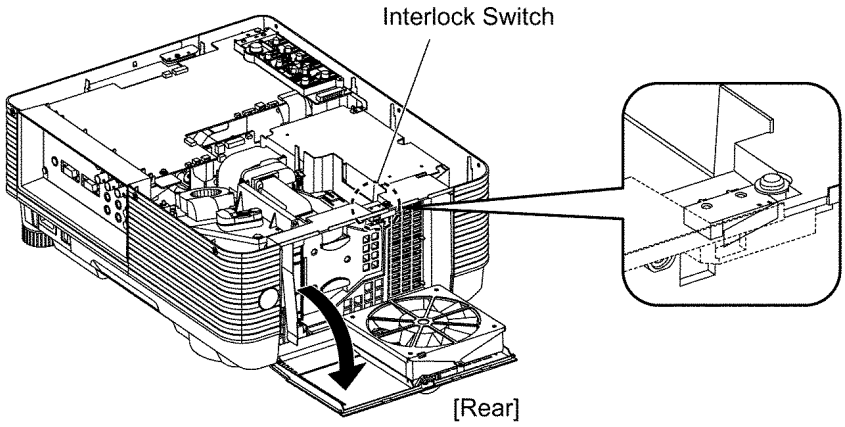
・The outside dimensions do not include the lens and other protruding parts.

*3 When using the projector at high altitudes (1 400 to 2 700 m), the upper limit for the ambient temperature drops by 5 °C.

3 Function for Safety

3.1. Interlock Switch

To ensure safety, the protection circuit of the main unit functions, and this projector becomes operation halt condition (a part of circuit is energizing) when the lamp unit cover is opened or installed incorrectly.

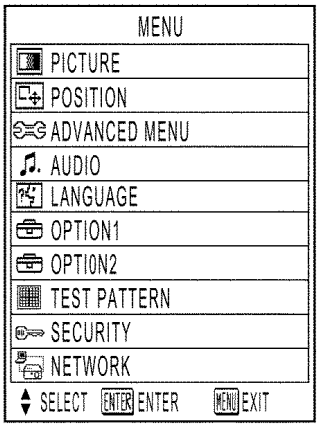


4 Serviceman Mode

This projector has Serviceman Mode in addition to standard on-screen menus (User Mode).

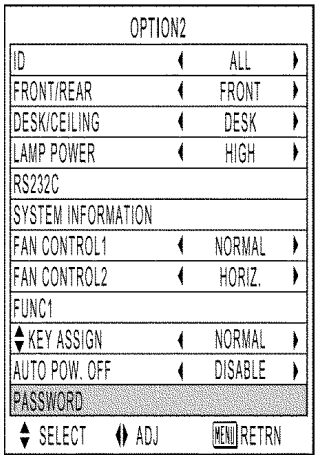
4.1. Setting to Serviceman Mode

(1) Press the MENU button.
The MENU screen will appear.

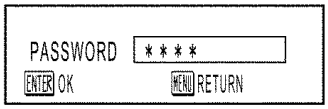


(2) Select “OPTION2” using the ▲ or ▼ buttons and press the ENTER button.
The OPTION2 screen will appear.

(3) Select “PASSWORD” using the ▲ or ▼ buttons and press the ENTER button.
The PASSWORD screen will appear.

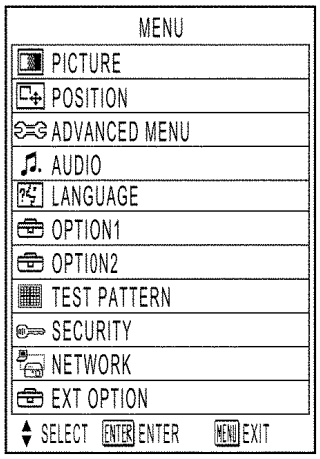


(4) Set the operation mode selector (Computer/Numeric, Projector) switch to “Computer/Numeric” on the remote control unit and input the password “1565”.
Note:
・Asterisk (*) will appear for the password numbers.



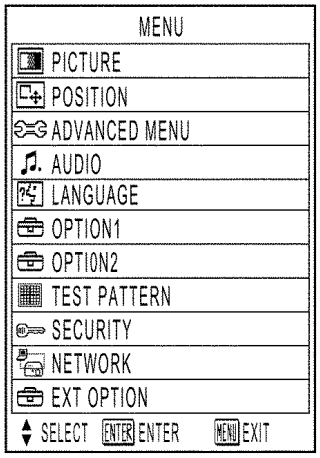
(5) Set the operation mode selector (Computer/Numeric, Projector) switch to “Projector” on the remote control unit and press the ENTER button.

(6) Press the MENU button.
Note:
・"SERVICEMAN" will appear.

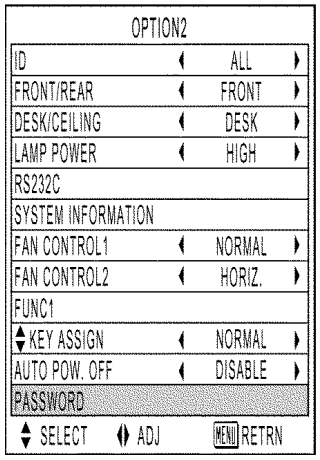


4.2. Resetting to User Mode

(1) Press the MENU button.
The MENU screen will appear.

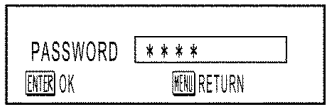


(2) Select “OPTION2” using the ▲ or ▼ buttons and press the ENTER button.
The OPTION2 screen will appear.



(3) Select PASSWORD using the ▲ or ▼ buttons and press the ENTER button.
The PASSWORD screen will appear.

(4) Set the operation mode selector (Computer/Numeric, Projector) switch to "Computer/Numeric" on the remote control unit and input the password "0000".
Note:
・Asterisk (*) will appear for the password numbers.



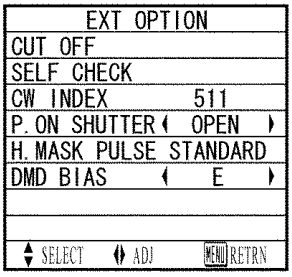
(5) Set the operation mode selector (Computer/Numeric, Projector) switch to "Projector" on the remote control unit and press the ENTER button.

(6) Press the MENU button.
Note:
・"USER" will appear.

4.3. Functions in Serviceman Mode

4.3.1. EXT OPTION

"EXT OPTION" is added to the MENU.



1. CUT OFF

   Sets the display ON/OFF for each color (R, G, B).

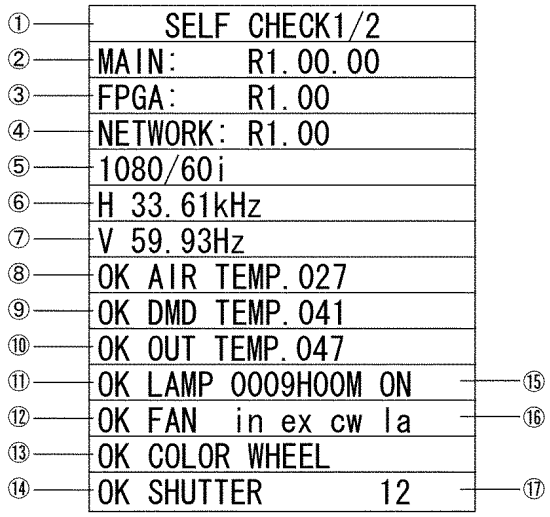
2. SELF CHECK

   Displays SELF CHECK.

   There are 2 pages, and it is switched with ◀ and ▶ buttons.

[1st page]

SELF CHECK 1/2



	Display Contents	Remarks
①	Page No.	
②	Main CPU Version Display	
③	FPGA Version Display	
④	Network CPU Version Display	
⑤	Signal Discrimination: Signal Name	Displays DDP version when no signal is inputted.
⑥	Horizontal Frequency	
⑦	Vertical Frequency	
⑧	Intake Air Temperature	Celsius display
⑨	DMD Temperature	Celsius display
⑩	Temperature around Lamp Unit	Celsius display
⑪	Lamp Unit Abnormality Check	OK: Normal NG: Lighting failure
⑫	Fan Abnormality Check	OK: Normal NG: Stop
⑬	Color Wheel Abnormality Check	OK: Normal NG: Stop
⑭	Shutter Circuit Abnormality Check	OK: Normal NG: Abnormal
⑮	Lamp Unit Cumulative Usage Time State of Lighting	Cumulative usage time: Conversion time ON: Lighting OFF: Turning off
⑯	Fan Individual Abnormality Check in ex cw la Lamp fan CW fan Exhaust fan Intake fan	Small letter: Normal Capital letter: Stop
⑰	Shutter Operation Frequency	It can be reset that it keeps pressing STD button for 3 seconds or more.

Note:
The item that abnormality is found in executing SELF CHECK after the last check is done is displayed in red characters.

[2nd page]

SELF CHECK 2/2

①	SELF CHECK2/2
②	LAMP LAD35:
③	RESET 0
④	RUNTIME[-1] 0H
⑤	RUNTIME[-2] 0H
⑥	RUNTIME[-3] 0H
⑦	RUNTIME[-4] 0H
⑧	LAMP LAD35L:
⑨	RESET 0
⑩	RUNTIME[-1] 0H
⑪	RUNTIME[-2] 0H
⑫	RUNTIME[-3] 0H
⑬	RUNTIME[-4] 0H

	Display Contents	Remarks
①	Page No.	
②	Normal Lamp	
③	Cumulative Usage Time	Reset Times
④		One time of reset
⑤		Two times of reset
⑥		Three times of reset
⑦		Four times of reset
⑧	Long Life Lamp	
⑨	Cumulative Usage Time	Reset Times
⑩		One time of reset
⑪		Two times of reset
⑫		Three times of reset
⑬		Four times of reset

3. CW INDEX

When the color wheel is replaced, adjusts it with ◀ and ▶ buttons.

Select DYNAMIC in PICTURE MODE, and execute it according to the following procedure with the red gradation (test pattern 9).

a. Decrease CW INDEX setting value from the default value (431) by 50, and set it to 381.

A blue-purple color mixture appears in the right of the screen. (When CEILING setting, appears it in the left of the screen.)

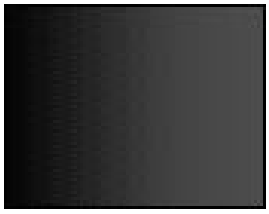
b. Increase CW INDEX setting value by 1, and record the value where the color mixture disappears. (The recorded value is assumed to "A".)

c. Increase CW INDEX setting value from the default value (431) by 50, and set it to 481.

An orange color mixture appears in the right of the screen. (When CEILING setting, appears it in the left of the screen.)

d. Decrease CW INDEX setting value by 1, and record the value where the color mixture disappears. (The recorded value is assumed to "B".)

e. Set the mean value (omission below decimal point) of "A" and "B" to the CW INDEX setting value.



4. P.ON SHUTTER

The state of the shutter when the power supply is turned ON can be selected.

・OPEN: When turning power ON, the shutter is opened. (Standard state)

・CLOSE: When turning power ON, the shutter is closed.

5. H.MASK PULSE

When the signal of 480i or 576i is inputted, the synchronization might become unstable. It might be stable when H.MASK PULSE is set to "SPECIAL".

・STANDARD: Does not execute special signal processing.

・SPECIAL: Executes special signal processing.

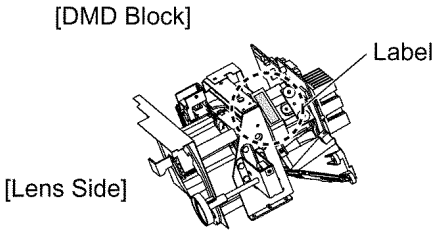
6. DMD BIAS

When the optical block is replaced, adjusts it with " ◀ " and " ▶ " buttons.

a. Sets it to the alphabet of "E, D, C or B" that has been described in the optical block.

b. After the setting, turn OFF the power to set it effectively.

* The label that describes the alphabet is pasted on the DMD.

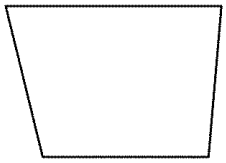


4.3.2. SUB-KEYSTONE

"SUB-KEYSTONE" is added to KEYSTONE in the "POSITION" menu.

If KEYSTONE and "Lens shift" are used at the same time, the right and left is corrected in the unbalance.

At this time, only the right side can be corrected by SUB-KEYSTONE.



1. The left side is adjusted straight by KEYSTONE.

2. The right side is adjusted straight by SUB-KEYSTONE.

Note:

- SUB-KEYSTONE is a supplementary adjustment function and there is no guaranty of completely functioning. Use it within the range where the trouble such as deforming the shape of the image does not occur.

4.3.3. Test Pattern Addition

"Red gradation", "Whole red", "Whole green" , "Whole blue", "Whole cyan, "Whole magenta" and "Whole yellow" patterns are added to the test pattern.

"Red gradation" is used for CW INDEX adjustment.

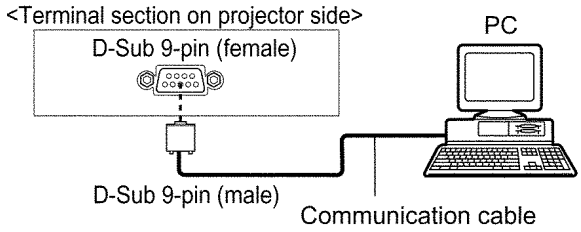
Red gredation Whole red Whole green Whole blue

Whole cyan Whole magenta Whole yellow

5 Using the Serial Terminals

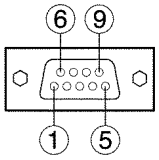
SERIAL terminals which are on the side-mounted connection terminals conform to RS-232C standard. This projector can be controlled by a PC which is connected as shown below.

5.1. Examples of Connection



5.2. Pin Assignments and Signal Names

D-Sub 9-pin (female), external appearance



Serial input terminal

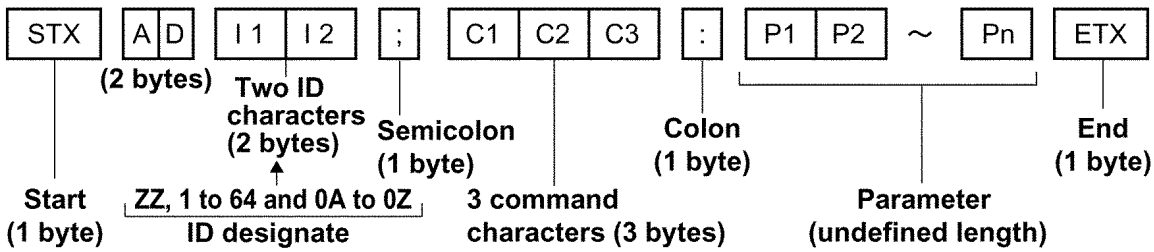
Pin No.	Signal name	Description
①		NC
②	TXD	Send data
③	RXD	Receive data
④		Connected internally
⑤	GND	Ground
⑥		NC
⑦	CTS	Connected internally
⑧	RTS	
⑨		NC

5.3. Communication Conditions (Factory Setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9 600bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

5.4. Basic Format

Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



Attention

- No command can be sent or received for 10 to 60 seconds after the lamp starts lighting. Try sending any command after that period has elapsed.
- When sending several commands, be sure to wait for a response from the projector before sending the next command. When sending commands without parameters, a colon (:) is not necessary.

Note

- If a wrong command parameter is sent, the projector will send an "ER401" command to the computer.
- A projector ID supported on the RS-232C interface is ZZ (ALL) , 01 to 64 and 0A to 0Z.
- If a command is sent with a projector ID specified, the projector will respond to the computer only in the following cases:

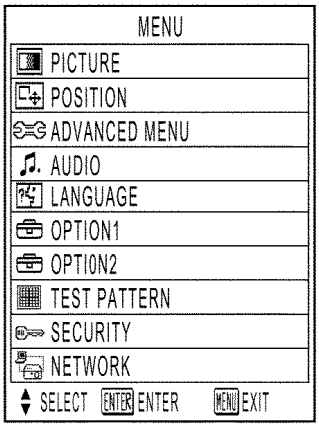
  If it coincides with the projector ID,

  ID specification is ZZ (ALL), or

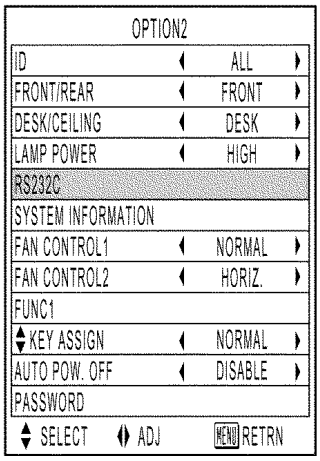
  ID specification is 0A to 0Z.

5.5. Procedure of Communication Condition Settings

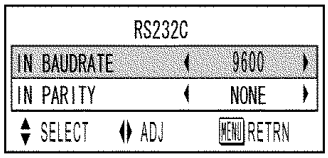
(1) Press the MENU button.
The MAIN MENU screen will be displayed.
(2) Press the ▲ and ▼ buttons to select “OPTION2”.



(3) Press the ENTER button.
(4) Press the ▲ and ▼ buttons to select “RS232C”.



(5) Press the ENTER button.
The RS232C screen will be displayed.
(6) Press the ▲ and ▼ buttons to select communication conditions.
(7) Press the ◀ and ▶ buttons to confirm the setting..
(8) Press the MENU button three times.
The on-screen indications disappear, and the system returns to the normal screen.



5.6. Control commands

5.6.1. Input Commands

Items	Commands:Parameters	Functions	Callback	Remarks
POWER	PON	POWER ON	PON	Calls back PON even if REMOTE2 is effective.
	POF	STAND-BY	POF	Calls back PON even if REMOTE2 is effective.
FREEZE	OFZ:0	FREEZE key 0=OFF 1=ON	OFZ:0	
	OFZ:1		OFZ:1	
MENU	OMN	MENU key	OMN	

Items	Commands:Parameters	Functions	Callback	Remarks
ENTER	OEN	ENTER key	OEN	
CURSOR	OCU	UP key	OCU	
	OCD	DOWN key	OCD	
	OCL	LEFT key	OCL	
	OCR	RIGHT key	OCR	
STANDARD	OST	STANDARD key	OST	
AUTO SETUP	OAS	AUTO SETUP execution	OAS	
SHUTTER	OSH:0	SHUTTER key 0=OFF 1=ON	OSH:0	Calls back ER402 when SHUTTER of REMOTE2 is ON.
	OSH:1		OSH:1	Calls back ER402 when SHUTTER of REMOTE2 is OFF.
INPUT SELECT	IIS:RG1	RGB1	IIS:RG1	Calls back ER402 if the input switch of REMOTE2 is available.
	IIS:RG2	RGB2	IIS:RG2	
	IIS:VID	VIDEO	IIS:VID	
	IIS:SVD	S-VIDEO	IIS:SVD	
	IIS:DVI	DVI	IIS:DVI	
FUNCTION1	FC1	FUNC1 key	FC1	
ON SCREEN	OOS:0	OSD selection 0= OSD OFF 1=OSD ON	OOS:0	Effective and invalidity are the same as remote control OSD key.
	OOS:1		OOS:1	
NUMBER KEY	ONK:0	NUMBER key 0	ONK:0	
	ONK:1	NUMBER key 1	ONK:1	
	ONK:2	NUMBER key 2	ONK:2	
	ONK:3	NUMBER key 3	ONK:3	
	ONK:4	NUMBER key 4	ONK:4	
	ONK:5	NUMBER key 5	ONK:5	
	ONK:6	NUMBER key 6	ONK:6	
	ONK:7	NUMBER key 7	ONK:7	
	ONK:8	NUMBER key 8	ONK:8	
	ONK:9	NUMBER key 9	ONK:9	
SYSTEM SEL	OSL	SYSTEM SELECTER key	OSL	

5.6.2. Data setting Commands

Items	Commands:Parameters	Functions	Callback	Remarks
PICTURE MODE	VPM:NAT	Sets to NATURAL.	VPM:NAT	
	VPM:STD	Sets to STANDARD.	VPM:STD	
	VPM:DYN	Sets to DYNAMIC.	VPM:DYN	
	VPM:CIN	Sets to CINEMA.	VPM:CIN	
	VPM:GRA	Sets to GRAPHIC.	VPM:GRA	
TV-SYSTEM	VSG:AT1	Sets to AUTO1.	VSG:AT1	Calls back ER401 when receiving the signal that cannot be switched.
	VSG:AT2	Sets to AUTO2.	VSG:AT2	
	VSG:NTS	Sets to NTSC.	VSG:NTS	
	VSG:N44	Sets to NTSC4.43.	VSG:N44	
	VSG:PAL	Sets to PAL.	VSG:PAL	
	VSG:PAN	Sets to N-PAL.	VSG:PAN	
	VSG:PAM	Sets to M-PAL.	VSG:PAM	
	VSG:SEC	Sets to SECAM.	VSG:SEC	
	VSG:P60	Sets to PAL60.	VSG:P60	
RGB/YPbPr SELECT	ORF:0	Sets to RGB.	ORF:0	Calls back ER401 when receiving the signal that cannot be switched.
	ORF:1	Sets to YPbPr/YCbCr.	ORF:1	
	ORF:2	Sets to AUTO.	ORF:2	
ASPECT	VSE:0	Sets to AUTO.	VSE:0	Calls back ER401 when receiving the signal that cannot be switched.
	VSE:1	Sets to 4:3.	VSE:1	
	VSE:2	Sets to 16:9.	VSE:2	
	VSE:3	Sets to S4:3.	VSE:3	
VOLUME	AVL:p1p2p3	Volume control	AVL:p1p2p3	p1p2p3: 000-063
MUTE	AMT:0	Sets to OFF.	AMT:0	Calls back AMT:0 when REMOTE2 is effective and SHUTTER is OFF. Calls back ER402 when REMOTE2 is effective and SHUTTER is ON.
	AMT:1	Sets to ON.	AMT:1	Calls back ER402 when REMOTE2 is effective and SHUTTER is OFF. Calls back AMT:1 when REMOTE2 is effective and SHUTTER is ON.
CONTRAST MODE	VCR:0	Sets to STANDARD.	VCR:0	
	VCR:1	Sets to HIGH.	VCR:1	
LAMP POWER	OLP:0	LAMP POWER setting 0=HIGH 1=LOW	OLP:0	Available in STANDBY Calls back ER402 when Long Life Lamp is used.
	OLP:1		OLP:1	

Items	Commands:Parameters	Functions	Callback	Remarks
SUB MEMORY	OCS:p1p2	SUB MEMORY switching	OCS:p1p2	p1p2: 00, 01, 02, 03, . . . 07, 08 Sets 00 when the sub memory is not used.
ENTRY SUB MEMORY	OES:p1p2	Enters current receiving signal into the sub memory.	OES:p1p2	P1p2: 01, 02, 03, . . . 07, 08
DELETE SUB MEMORY	ODS:p1p2	Deletes data in the specified sub memory.	ODS:p1p2	P1p2: 01, 02, 03, . . . 07, 08
TEST	OTS:p1p2	Test pattern switching 00=OFF 01=Whole white 02= Whole black 03=Flag 05=1% window 06=1% reverse window 07=Focus 08=colorbar 10=16:9 22=Whole red 23=Whole green 24=Whole blue 41=Red gradation 28=Cyan 29=Magenta 30=Yellow	OTS:p1p2	
SET DATE	TSD:y1y2y3y4 m1m2d1d2w	Date setting	TSD:y1y2y3y4m1m2d1d2w	y1y2y3y4m1m2d1d2 + a day of the week (Mon.=1 Tues.=2 --- Sun.=7) *1
SET TIME	TST:h1h2m1m2s1s2	Time setting	TST:h1h2m1m2s1s2	*1

*1 Displays of SET DATE and SET TIME are set by UTC (Coordinated Universal Time).

5.6.3. Inquiry Commands

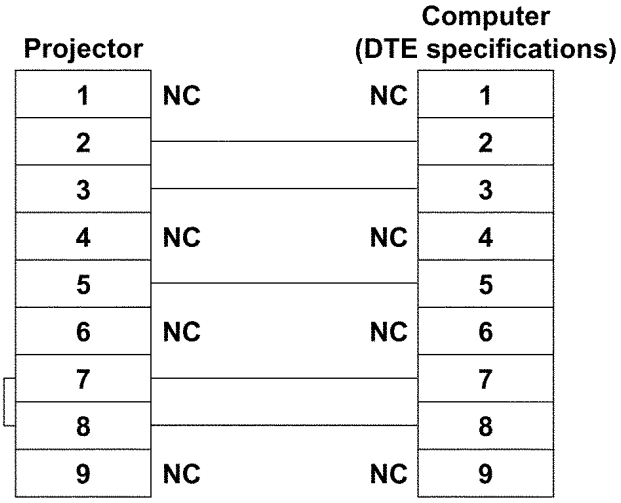
Items	Commands:Parameters	Functions	Callback	Interpretation	Remarks
POWER CONDITION	QPW	Inquiry about POWER CONDITION	000	OFF	Available in STANDBY
			001	ON	
FREEZE	QFZ	Inquiry about FREEZE	0	OFF	
			1	ON	
SHUTTER	QSH	Inquiry about SHUTTER	0	OFF	
			1	ON	
INPUT SELECT	QIN	Inquiry about INPUT SELECT	RG1	RGB1	
			RG2	RGB2	
			VID	VIDEO	
			SVD	S-VIDEO	
			DVI	DVI	
TEST	QTS	Inquiry about test pattern	p1p2		
ON SCREEN	QOS	Inquiry about OSD	0	OFF	Available in STANDBY
			1	ON	
PICTURE MODE	QPM	Inquiry about PICTURE MODE	NAT	NATURAL	
			STD	STANDARD	
			DYN	DYNAMIC	
			CIN	CINEMA	
			GRA	GRAPHIC	
COLOR	QVC	Inquiry about COLOR	p1p2p3		
TINT	QVT	Inquiry about TINT	p1p2p3		
COLOR TEMP.	QTE	Inquiry about COLOR TEMP.	1	MIDDLE	
			2	HIGH	
			4	USER	
			10	DEFAULT	
WHITE BALANCE LOW(R)	QOR	Inquiry about WHITE BALANCE LOW (R)	p1p2p3		
WHITE BALANCE LOW(G)	QOG	Inquiry about WHITE BALANCE LOW (G)	p1p2p3		
WHITE BALANCE LOW(B)	QOB	Inquiry about WHITE BALANCE LOW (B)	p1p2p3		
WHITE BALANCE HI(R)	QHR	Inquiry about WHITE BALANCE HIGH (R)	p1p2p3		
WHITE BALANCE HI(G)	QHG	Inquiry about WHITE BALANCE HIGH (G)	p1p2p3		
WHITE BALANCE HI(B)	QHB	Inquiry about WHITE BALANCE HIGH (B)	p1p2p3		
CONTRAST	QVR	Inquiry about CONTARST	p1p2p3		
BRIGHTNESS	QVB	Inquiry about BRIGHTNESS	p1p2p3		
SHARPNESS	QVS	Inquiry about SHARPNESS	p1p2p3		
NOISE REDUCTION	QNS	Inquiry about NR	0	OFF	0-3 when RGB1, RGB2 or DVI input 0-1 when other input
			1	ON/1	
			2	2	
			3	3	
AI CONTROL	QAI	Inquiry about AI CONTROL	0	OFF	
			1	ON	
RGB/YPbPr SELECT	QRF	Inquiry about RGB/YPbPr	0	RGB	Calls back ER401 when receiving the signal that cannot be switched.
			1	YPbPr/YCbCr	
			2	AUTO	

Items	Commands:Parameters	Functions	Callback	Interpretation	Remarks
TV-SYSTEM	QSG	Inquiry about TV-SYSTEM	AT1	AUTO1	
			AT2	AUTO2	
			NTS	NTSC	
			N44	NTSC4.43	
			PAL	PAL	
			PAN	N-PAL	
			PAM	M-PAL	
			SEC	SECAM	
			P60	PAL60	
			BW5	Black and white 50	
			BW6	Black and white 60	
POSITION	QTH	Inquiry about horizontal position	p1p2p3p4		
	QTV	Inquiry about vertical position	p1p2p3p4		
ASPECT	QSE	Inquiry about ASPECT	0	AUTO	
			1	4:3	
			2	16:9	
			3	S4:3	
ZOOM	QZH	Inquiry about horizontal zoom	p1p2p3		
	QZV	Inquiry about vertical zoom	p1p2p3		
CLOCK PHASE	QCP	Inquiry about CLOCK PHASE	p1p2p3		Calls back ER401 when receiving the signal that cannot be switched.
TOTAL DOTS	QTD	Inquiry about TOTAL DOTS	p1p2p3p4		
DISPLAY DOTS	QDD	Inquiry about DISPLAY DOTS	p1p2p3p4		
TOTAL LINES	QTL	Inquiry about TOTAL LINES	p1p2p3p4		
DISPLAY LINES	QDL	Inquiry about DISPLAY LINES	p1p2p3p4		
CLAMP POSITION	QLT	Inquiry about ClAMP POSITION	p1p2p3		
KEYSTONE	QKS	Inquiry about KEYSTONE	p1p2p3		Range 0-254 OSD value + 127
LINEARITY	QLI	Inquiry about LINEARITY	p1p2p3		
LANGUAGE	QLG	Inquiry about LANGUAGE	ENG	English	Available in STANDBY
			DEU	German	
			FRA	French	
			ESP	Spanish	
			ITL	Italian	
			JPN	Japanese	
			CHI	Chinese	
			RUS	Russian	
			KOR	Korean	
INSTALLATION	QSP	Inquiry about INSTALLATION	0	Front/Floor	Available in STANDBY
			1	Rear/Floor	
			2	Front/Ceiling	
			3	Rear/Ceiling	
SET RUNTIME	QST	Inquiry about projector runtime	p1p2p3p4p5	00000h - 99999h	Available in STANDBY
LAMP ON TIME	Q$L:1	Inquiry about LAMP ON TIME Conversion time for HIGH of recognized lamp	p1p2p3p4	0000h - 9999h	Available in STANDBY
LAMP POWER	QLP	Inquiry about LAMP POWER	0	HIGH(300 W)	Available in STANDBY
			1	LOW(240 W)	
			2	Long life lamp (160 W)	
TEMP Inquiry	QTM:0	Inquiry about intake air temperature	p1p2p3p4/p5p6p7p8	(Celsius/Fahrenheit)	Available in STANDBY
	QTM:1	Inquiry about lamp surrounding temperature			
	QTM:2	Inquiry about optical module temperature			
FAN CONTROL1	QFM	Inquiry about FAN CONTROL1	0	NORMAL	Available in STANDBY
			1	HIGHLAND	
FUNCTION1	QFC	Inquiry about FUNC1	1	LAMP POWER	Available in STANDBY
			2	SIZE	
			3	SUB MEMORY LIST	
			4	AUDIO	
SUB MEMORY	QSB	Inquiry about SUB MEMORY	p1p2		"p1p2: 01, 02, 03, . . . 07, 08 ER401 when it is not used"
GET DATE	QGD	Inquiry about the system date	y1y2y3y4m1m2d1d2w	yyyymmdd (a day of the week)	"A day of the week: Mon.=1, Tues.=2, . . . Sun.=7"
GET TIME	QGT	Inquiry about the system time	h1h2m1m2s1s2	hhmmss	UTC

Items	Commands:Parameters	Functions	Callback	Interpretation	Remarks
GET SYSTEM STATUS	Q$S	Inquiry about the system (lamp) status	0	Lamp off	
			1	In turning on	
			2	Lamp on	
			3	In turning off (cooling)	
VOLUME	QAV	Inquiry about VOLUME	p1p2p3	000 - 063	
MUTE	QAM	Inquiry about MUTE	0	OFF	
			1	ON	
CONTRAST MODE	QCR	Inquiry about CONTRAST MODE	0	Standard	
			1	High	

5.7. Cable specifications

<Connecting to a PC>



Note

To connect the computer to the SERIAL terminal, prepare an adequate communication cable that fits to your personal computer.

6 Setting the Projector ID Number Remote Control

Every projector has its ID number and the ID number of the controlling projector must be set to the remote control in advance so that the user can operate the remote control. The ID number of the projector is set to “ALL” on shipping, and use the ID ALL button of the remote control when using only a single projector.

Procedure of ID setting

1. Change the position of the operation mode selector switch to “Computer”.
2. Press the ID SET button, and within five seconds use the numeric (0 to 9) buttons to enter the 2-digit ID number set by the projector.
3. Change the position of the operation mode selector switch to “Projector”.

   However, if the ID ALL button is pressed, the projector can be controlled regardless of the ID number of the projector (simultaneous control mode).

   - Do not press the ID SET button accidentally or carelessly because the ID number on the remote control can be set even when no projector is around.

     If the ID SET button is pressed, the ID number goes back to the one set before pressing the ID SET button unless a numeric button is pressed within five seconds after the ID SET button is pressed.
   - Your specified ID number is stored in the remote control unit unless another one is specified later. However, the stored ID will be erased if the batteries of the remote control are left exhausted. When the dry cells are replaced, set the same ID number again.
   - When setting the ID number, the numeric buttons entering of two digits is required even if the 1-digit ID number is set on the projector side.

     For example, setting remote control ID when ID number of the projector is "1": Press the numeric buttons of "0" and "1" within five seconds after the ID SET button is pressed.

7 Support for Service

7.1. Supporting Methods

We will support according to the following methods.

Supporting methods	Applied parts
Replaced by module or block	FM-Module (For specified components, supplies them discretely.)
	Ballast module
	Power module (PB-Module)
	PA-Module
Replaced by discrete components	Other components
Replaced at the manufacturing department	Optical block unit (including DMD™ block), DMD™ drive module, Mechanical shutter motor unit, Assembly parts

7.2. Note for Replacement of P.C.Boards

7.2.1. When replacing the A-P.C.Board

・Transfer the data of the original A-P.C.Board to the new A-P.C.Board using the adjustment software and a personal computer. (If you cannot transfer the data, remove IC2508 and IC2509 from the original board and mount them on the new board.)

* For the adjustment software, consult an authorized service center.

7.3. Replacement of the lithium battery on the A-P.C.Board

If the lithium battery will be empty, replace it with a new one (CR2032 or equivalent).

Cautions

・Explosion may occur if replacing the battery with an incorrect one.

・Dispose of used batteries according to the instructions.

8 Cautions for Service

8.1. Servicing Methods

・Never unplug the power cord from the outlet, open the circuit breaker, or perform other procedures to cut off the power line during the operation of any cooling fan.

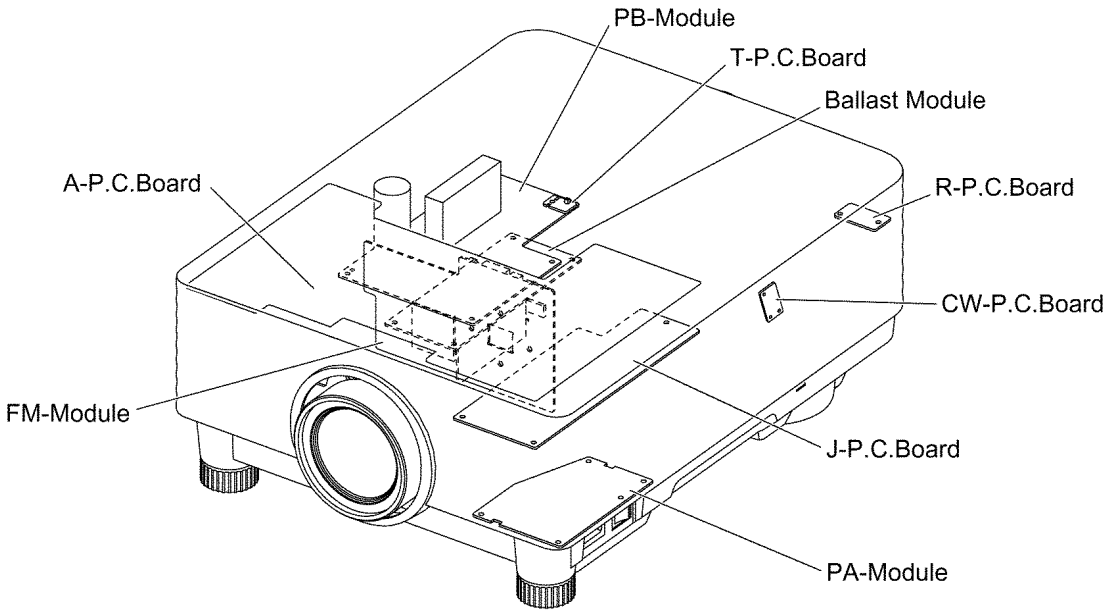
・Be sure to unplug the power cord from the power outlet before servicing.

Powering off the projector

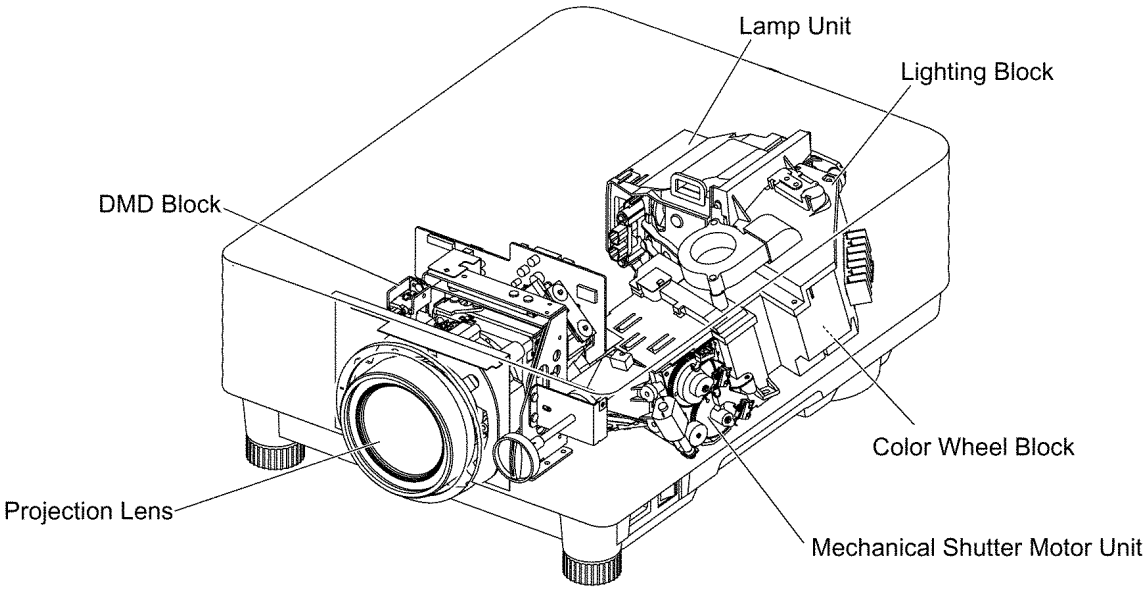
1. Press the POWER button on the main unit, or the POWER OFF " ⏻ " button on the remote control.
2. Select "Execute" with ◀ or ▶ button and press the ENTER button.(or press the POWER button again.)
   The projection of the image stops, and the power indicator of the main unit lights up orange. (The cooling fan keeps running.)
3. Wait until the POWER indicator of the main unit turns to red (i.e., until the cooling fans stops).
4. Press the " ◯ " marked side of the MAIN POWER switch to remove all power from the projector.

9 Parts Location

9.1. Electrical Parts Location



9.2. Electromechanical Parts Location



10 Replacement of Lamp Unit

Cautions

- Wait until the lamp is cooled sufficiently before replacing the lamp unit.

10.1. Precautions on Lamp Unit Replacement

Remove the power plug and confirm that the surroundings of the lamp unit have cooled off.

- Be careful when handling a light source lamp. The lamp unit has high internal pressure. If improperly handled, explosion might result.
- A used lamp unit may burst if it is handled violently.

  For disposition of used lamps, request an industrial waste disposal contractor.
- Do not reset the cumulative time, except when the lamp unit has been replaced with a new unit.
- If you continue to use a lamp after the replacement time, the lamp may break.
- Phillips screwdriver is necessary when replacing a lamp unit.

  Take care not to slip your hand when using a screwdriver.
- A lamp unit is an optional part. Contact the dealer.

  Replacement lamp unit model No.: ET-LAD35 (single bulb)

  Rating: 300 W

  Long-life lamp unit model No.: ET-LAD35L (single bulb)

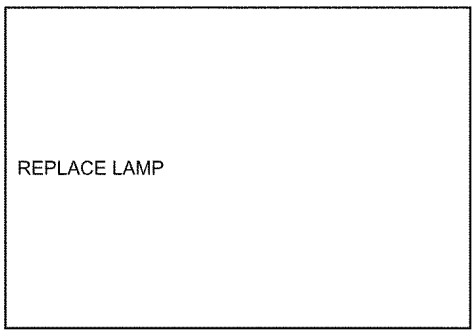
  Rating: 160 W
- Other lamps than specified above cannot be used. Be sure to use the specified lamp.

10.2. Timing of Lamp Unit Replacement

The lamp used for the light source has its due life. The life of light source lamp used in the main unit is 1 500 hours[*1] (when lamp output is HIGH). However, it may happen that the lamp becomes dead (will not light) by the time of 1 500 hours[*1] depending on the characteristics of individual lamps and working conditions (lamps may reduce their life affected by the times of lighting and the intervals between previous lighting and next lighting). Therefore, it is strongly recommended for the user to keep a spare bulb. If your lamp unit is not replaced after 1 300 hours[*2] (with the lamp output set at “HIGH”), power supply will be turned off automatically at the time of 1 500 hours[*1] entering a standby state. After 1 500 hours[*1] of initial lighting, power supply is turned off automatically about 10 minutes later, entering a standby state even if it is turned on again.

- **Indication after 1300 hours[*2]**
  (with the lamp output set at "HIGH")

  When lamp unit used hours have reached 1 300 hours[*2], lamp monitor (LAMP) lights up including standby state.
  Further, an on-screen indication will appear for about 30 seconds as shown in the diagram on the right, recommending replacement of lamp unit. (The indication on the right diagram will disappear after about 30 seconds or when either control button on the upper panel of main unit control button is operated.)
  After the time of 1500 hours[*1], the on-screen indication will not disappear unless the menu (MENU) button is operated.



[*1] This time period is 4 000 hours when long-life lamps are used.
[*2] This time period is 3 800 hours when long-life lamps are used.

10.3. Indication of Lamp Monitor

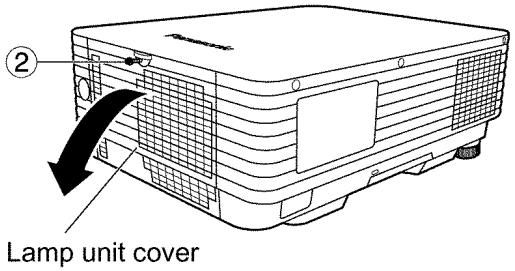
Name of monitor lamp	Lamp indication	Information	Checkpoint	Remedial measure
Lamp monitor **LAMP** ◎	Lighting in red	Indicates the time for replacing the lamp unit.	・Did you notice a "REPLACE THE LAMP" message on the screen when turning on the projector power supply.	・This lamp monitor lights up when the lamp unit used hours have reached 1 300 hours (3 800 hours when long-life lamps are used). Request the dealer to replace the lamp unit.
	Blinking in red (3 times)	Error is detected in the lamp circuit.	・Did you turn the power back on immediately after turning it off?	・Wait until the lamp has cooled off, and then turn on the power.
			・Some error has arisen in the lamp circuit. ・Check for fluctuation (or drop) in the source voltage.	・Turn off the MAIN POWER switch using the procedure on "Powering off the projector" in the section 8.1. "Servicing Methods" and consult your dealer or Authorized Service Center.

10.4. Procedure of Lamp Unit Replacement

NOTE:

・Be sure to follow steps 8 to 13 in ten minutes after turning on the projector because the projector is turned off in ten minutes if the RUNTIME indication is 1 500h or more.

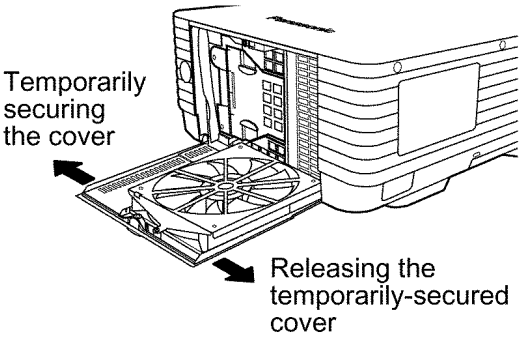
① **Turn off the Main power switch using the procedure on " Powering off the projector " in the section 8.1. "Servicing Methods", unplug the power cord and confirm that the surroundings of the lamp unit have cooled off.**

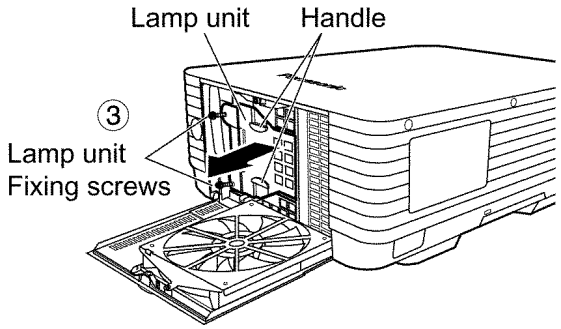


Have a Phillips screwdriver ready ahead of time.

② **Loosen one screw securing the lamp unit cover, and then open the lamp unit cover.**

Note · You can temporarily secure the lamp unit cover in the opened condition. By sliding the cover in the direction of the arrow, you can temporarily secure the cover or release the temporarily-secured cover.





③ **Loosen two lamp unit fixing screws, take hold of the handles, and remove the lamp unit.**

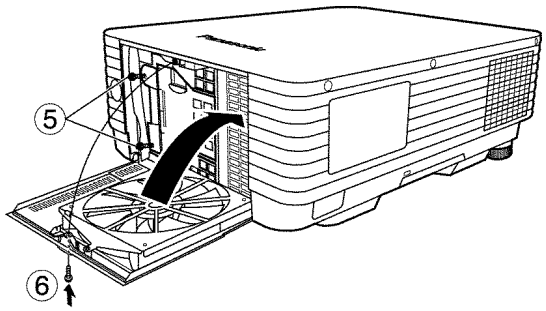
④ **Install the new lamp unit.**

Insert the lamp unit by pressing it applying equal force on both left and right sides.

Caution

The lamp unit will be hot after it has been used.

You might get burned if you touch it while it is still hot.



⑤ **Use a Phillips screwdriver to securely tighten the two lamp unit fixing screws.**

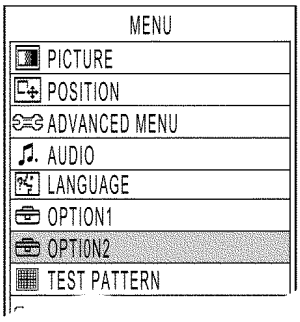
⑥ **Close the lamp unit cover by pushing the upper-right corner until it clicks. Firmly tighten the one screw securing the lamp unit cover.**

Attention · Firmly install the lamp unit and lamp unit cover. If not installed firmly, a protection circuit will function and the power will not be turned on.

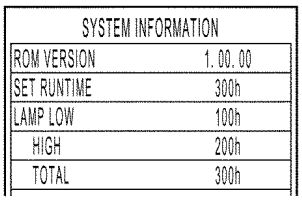
⑦ **Insert the power cord plug into the wall outlet and then press the MAIN POWER switch.**

Attention · If the power does not turn on even after turning the MAIN POWER switch "I", turn the MAIN POWER "O", confirm that the lamp unit and door are installed correctly, and turn on again.

⑧ **Press the "POWER" button (or the POWER OFF (I) button on the remote control) so that a picture is projected onto the screen.**



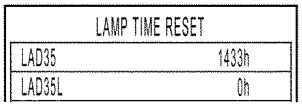
⑨ **Press the "MENU" button to display the MENU screen, and then press the ▲ and ▼ buttons to move the cursor to select "OPTION2".**



⑩ **Press the "ENTER" button to display the "OPTION2" screen, and select "SYSTEM INFORMATION" with the ▲ and ▼ buttons.**

⑪ **Press the "ENTER" button.**

The SYSTEM INFORMATION screen will be displayed.



⑫ **Press and hold the "ENTER" button on the projector or the remote control for approximately 3 seconds.**

An item "LAMP TIME RESET" will be added.

⑬ **Press the ENTER button, and when the "LAMP TIME RESET" display flashes, press the ENTER button again.**

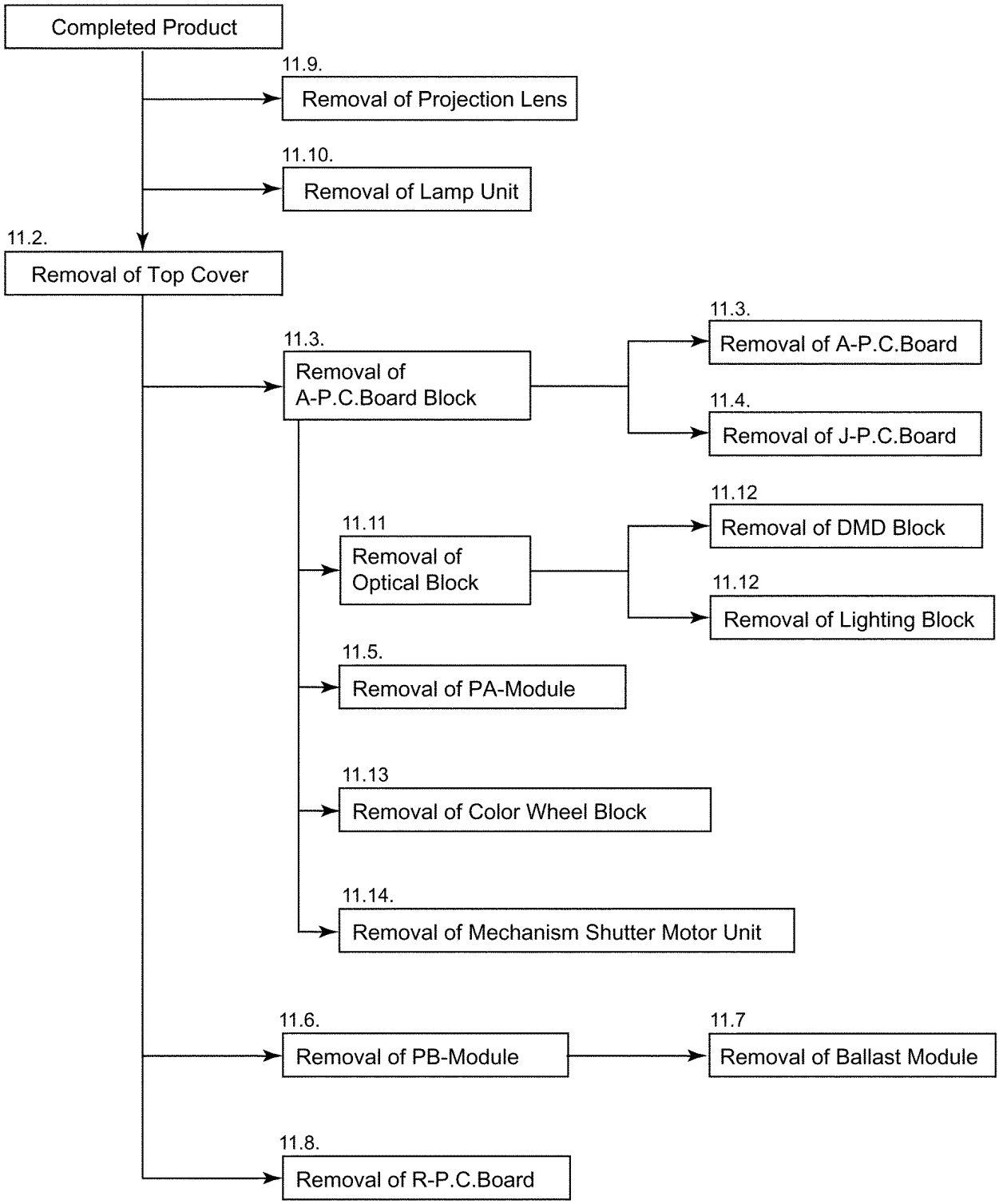
The used hours of the lamp unit will be reset to zero.

Note · When the "LAMP TIME RESET" display flashes, the lamp time reset can be canceled by pressing the MENU button.

11 Disassembly Instructions

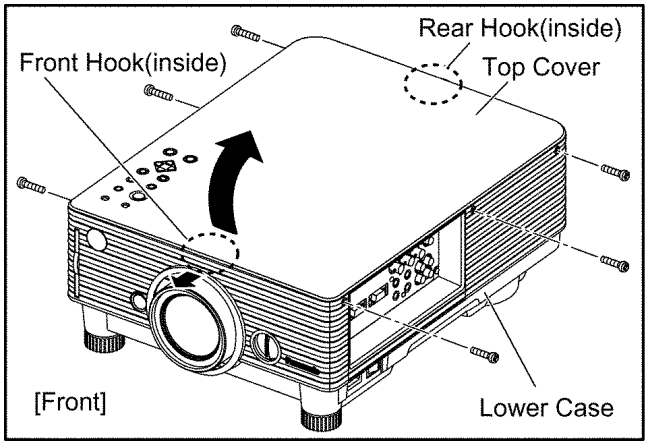
11.1. Flowchart for Disassembly

To assemble, reverse the disassembly procedures.



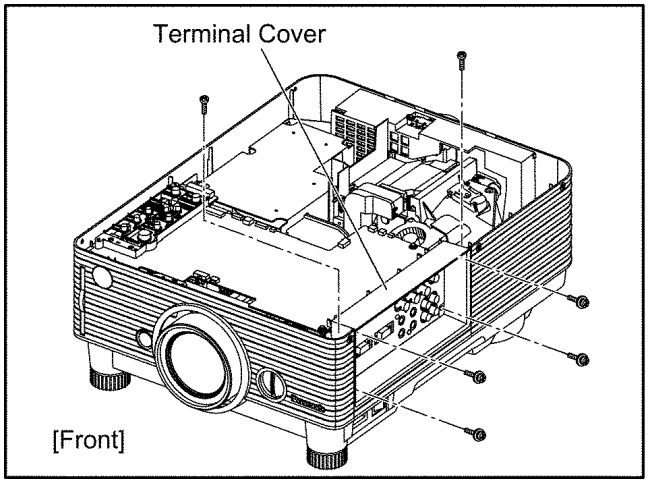
11.2. Removal of Top cover

(1) Unscrew the 6 screws on the side.
(2) Lift the top cover and remove it.
   1. Pull the upper part of the lens hole of the lower case a little forward and disconnect the front hook.
   2. While lifting the front, disconnect the rear hook and remove the top cover.

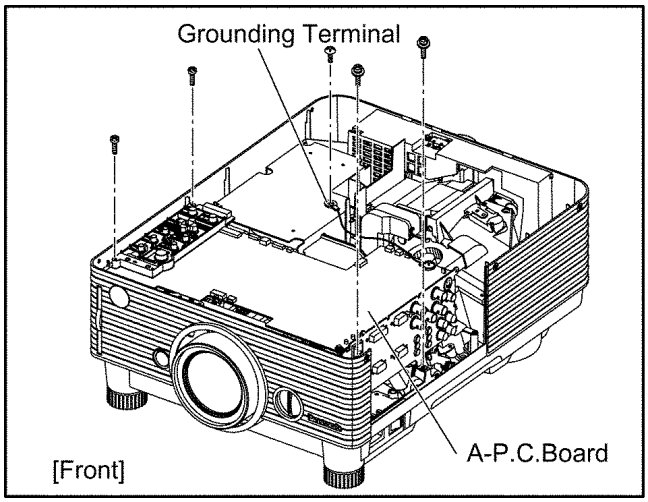


11.3. Removal of A-P.C.Board

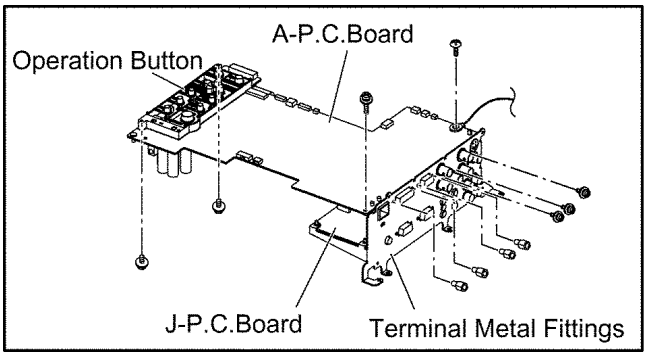
(1) Remove the top cover according to the section 11.2. "Removal of Top cover".
(2) Unscrew the 6 screws and remove the terminal cover.



(3) Unscrew the 1 screw and remove the grounding terminal.
(4) Unscrew the 4 screws and remove the A-P.C.Board block.

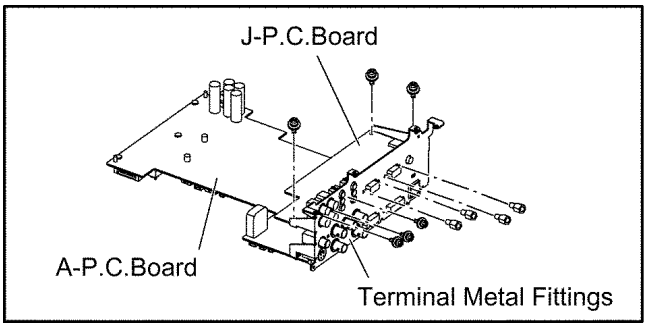


(5) Pull out the flexible cable connected to the J-P.C.Board. (The reverse side of A-P.C.Board)
(6) Unscrew the 9 screws and remove the A-P.C.Board.
(7) Unscrew the 2 screws and remove the operation button.



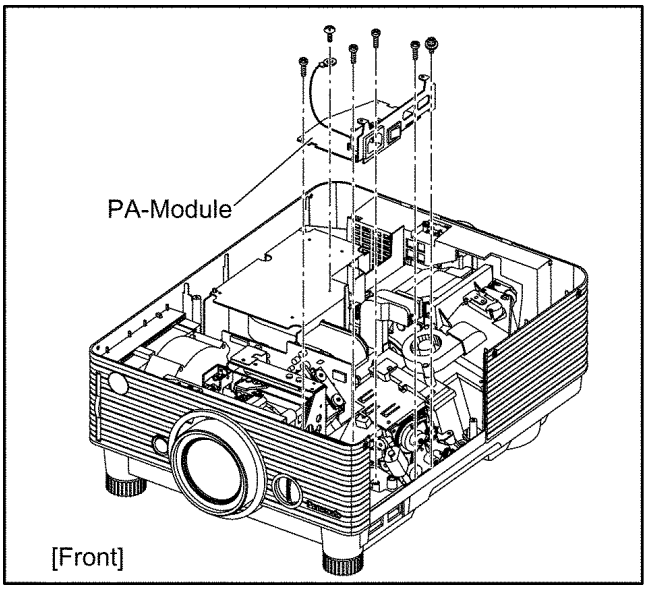
11.4. Removal of J-P.C.Board

(1) Remove the A-P.C.Board block according to the steps 1 through 5 in the section 11.3. "Removal of A-P.C.Board".
(2) Pull out the flexible cable connected to the A-P.C.Board.
(3) Unscrew the 10 screws and remove the J-P.C.Board.



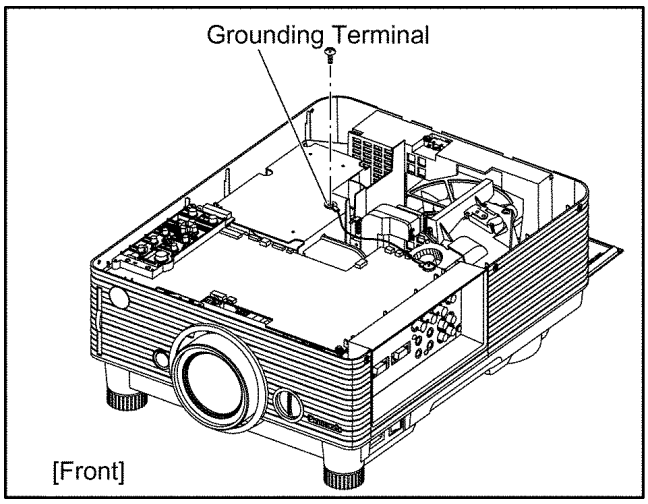
11.5. Removal of PA-Module

(1) Remove the A-P.C.Board block according to the steps 1 through 5 in the section 11.3. "Removal of A-P.C.Board".
(2) Unscrew the 1 screw and remove the grounding terminal.
(3) Unscrew the 5 screws and remove the PA-Module.

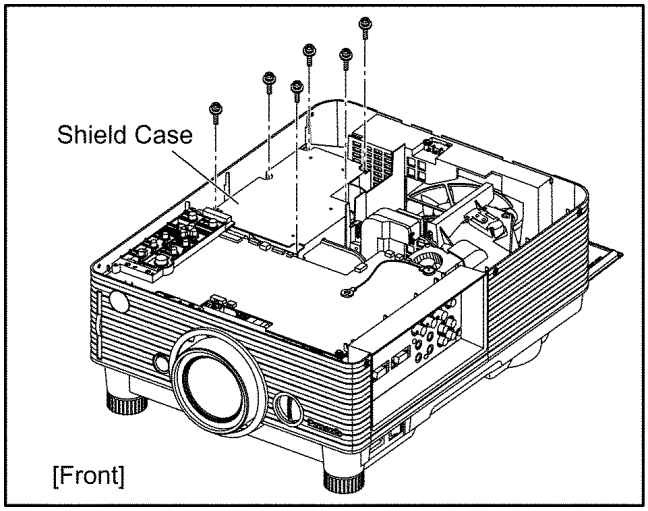


11.6. Removal of PB-Module

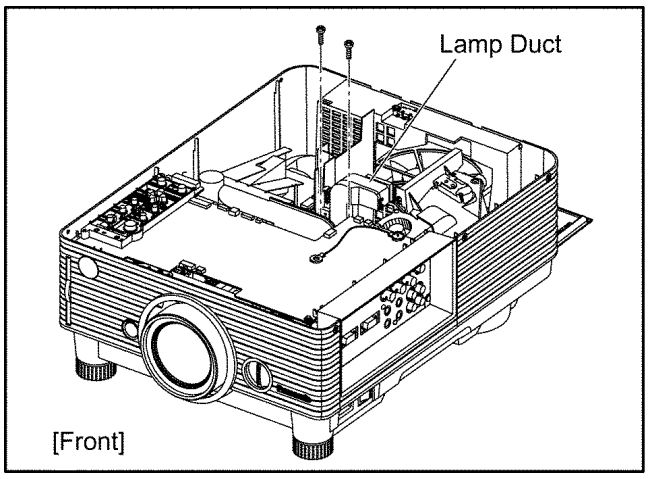
(1) Remove the lamp unit according to the section 11.10. "Removal of Lamp Unit".
(2) Remove the top cover according to the section 11.2. "Removal of Top cover".
(3) Unscrew the 1 screw and remove the grounding terminal.



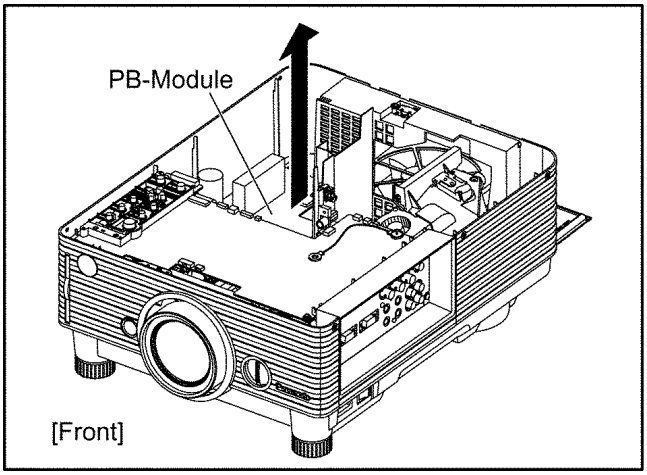
(4) Unscrew the 6 screws and emove the shield case.



(5) Unscrew the 2 screws and remove the lamp duct.

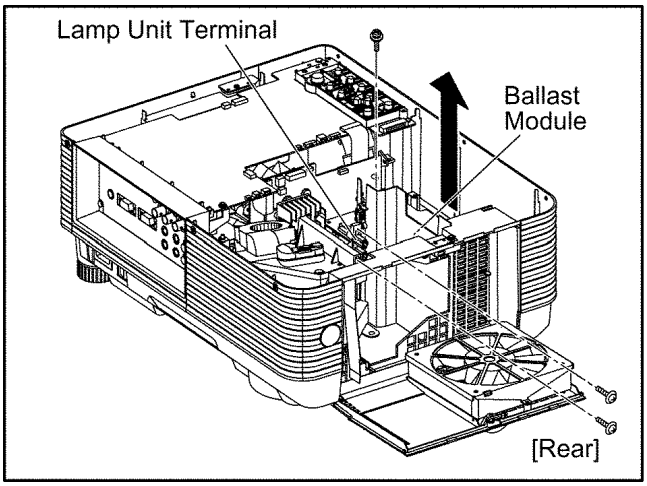


(6) Remove the PB-Module.

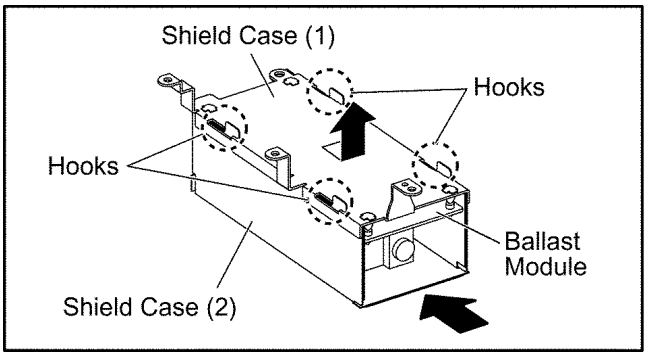


11.7. Removal of Ballast Module

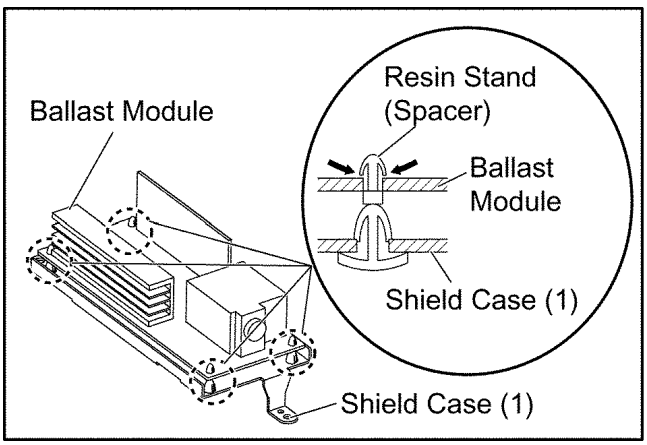
(1) Remove the PB-Module according to the section 11.6. "Removal of PB-Module".
(2) Unscrew the 2 screws and remove the lamp unit terminal.
(3) Unscrew the 1 screw and remove the ballast module block.



(4) While sliding the shield cases (1) and (2) mutually, disconnect their hooks and separate the cases.

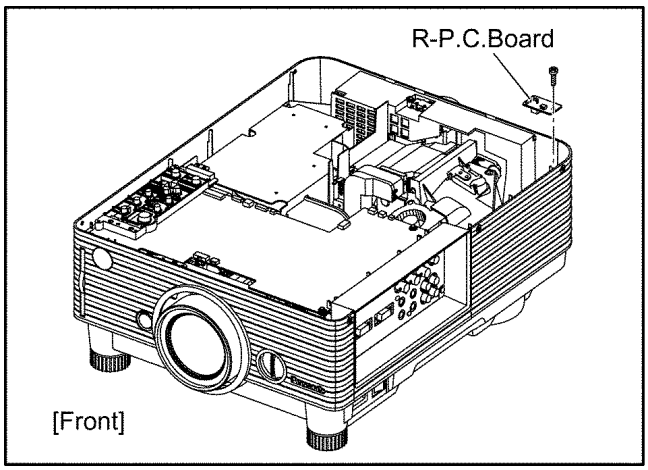


(5) Remove the ballast module while pressing hooks of the 4 resin stands (spacers) to shut.



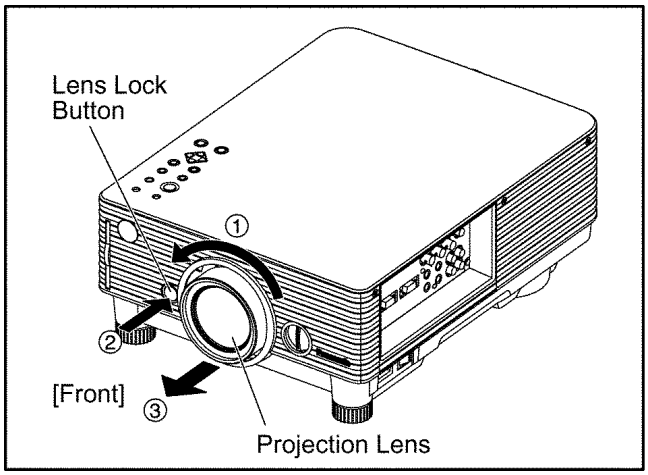
11.8. Removal of R-P.C.Board

(1) Remove the top cover according to the section 11.2. "Removal of Top cover".
(2) Unscrew the 1 screw and remove the R-P.C.Board.



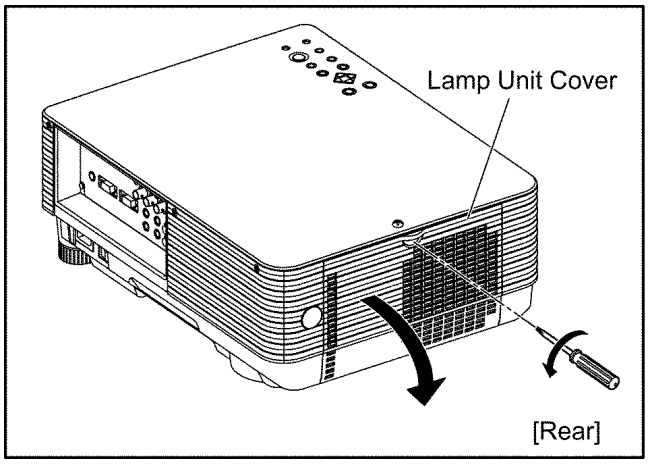
11.9. Removal of Projection Lens

(1) Fully turn the projection Lens counterclockwise.
(2) Turn the projection lens counterclockwise in addition while pressing the lens lock button.
(3) Remove the projection lens.

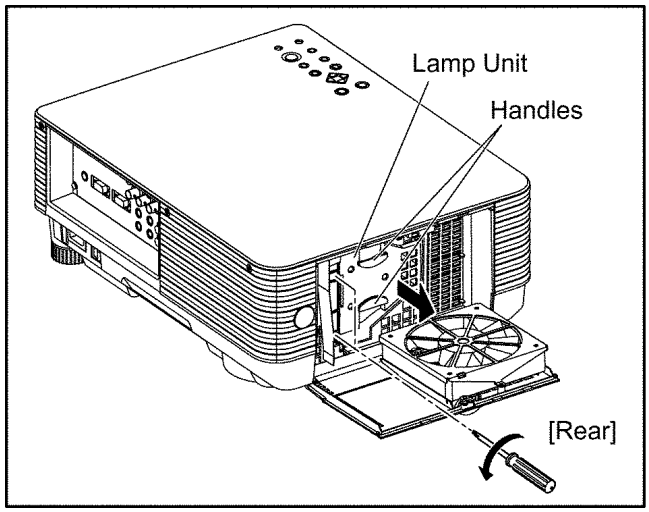


11.10. Removal of Lamp Unit

(1) Loosen the 1 screw until it idles, then open the lamp unit cover.

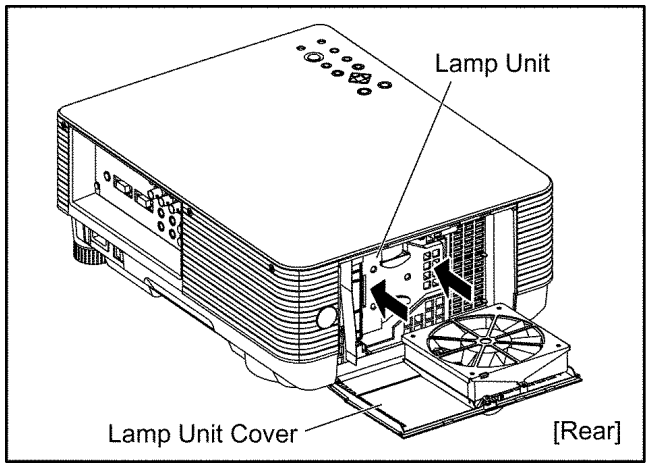


(2) Loosen the 2 screws fixing the lamp unit until they idle, hold the handles and take the lamp unit out.



Note:

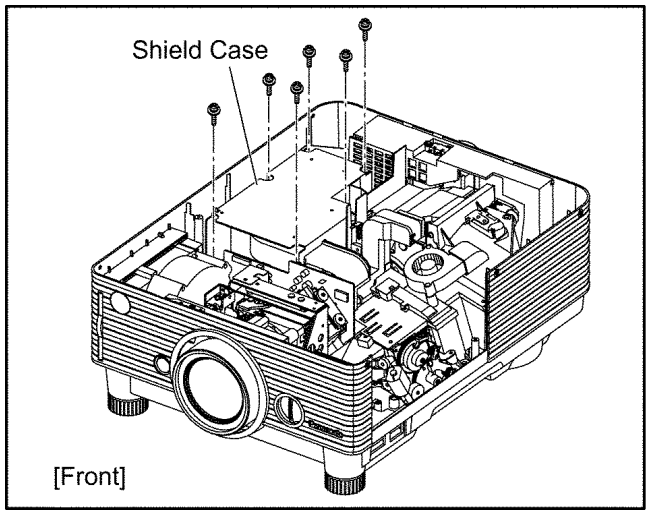
When installing the lamp unit (or a new one) in the main unit, place it in a specified position and press the right and left sides of the lamp unit, and confirm the lamp unit is inserted securely. Then, tighten the 2 screws fixing the lamp unit, and close the lamp unit cover.



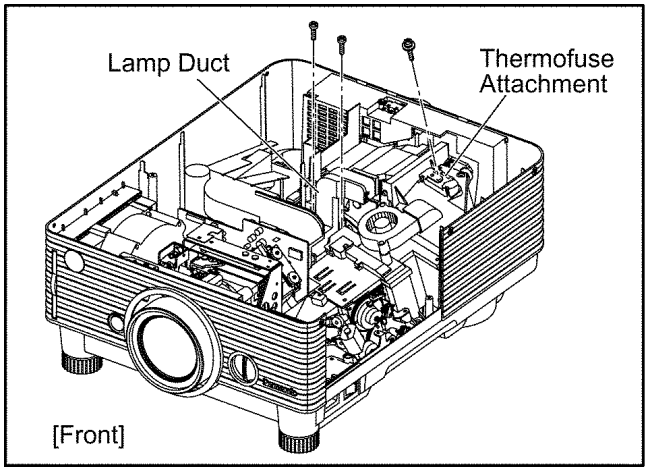
11.11. Removal of Optical Block

(1) Remove the A-P.C.Board block according to the steps 1 through 5 in the section 11.3. "Removal of A-P.C.Board".

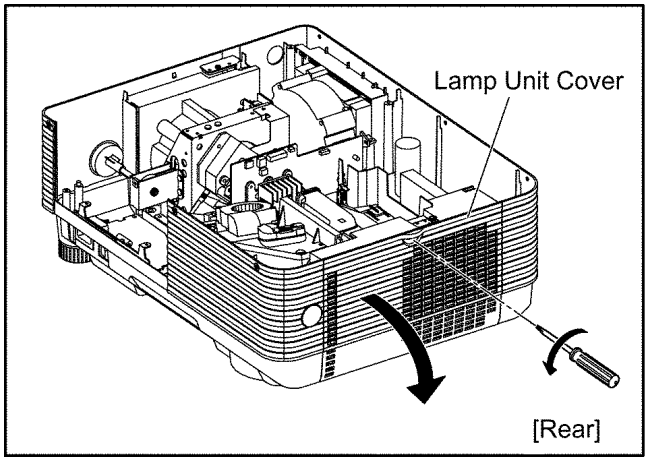
(2) Unscrew the 6 screws and remove the shield case.



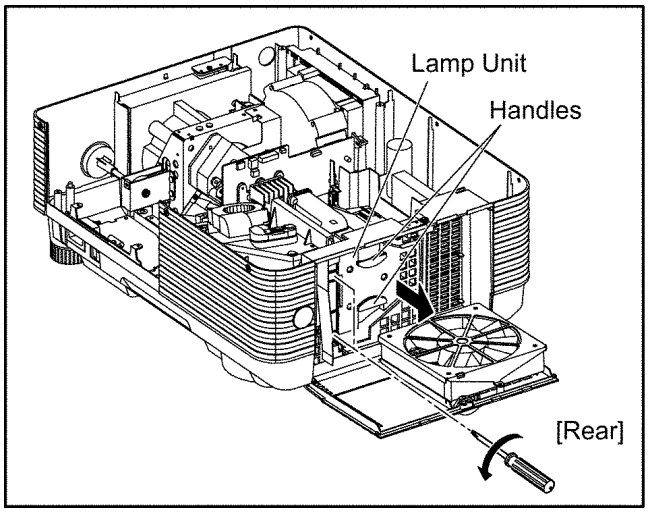
(3) Unscrew the 2 screws and remove the lamp duct.
(4) Unscrew the 1 screw and remove the thermofuse attachment.



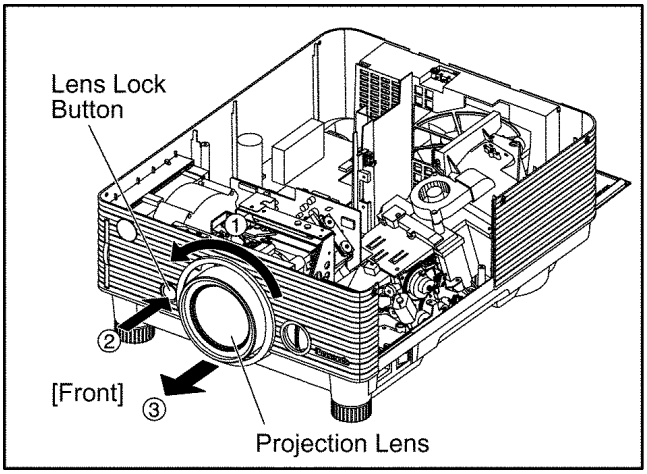
(5) Loosen the 1 screw until it idles, then open the lamp unit cover.



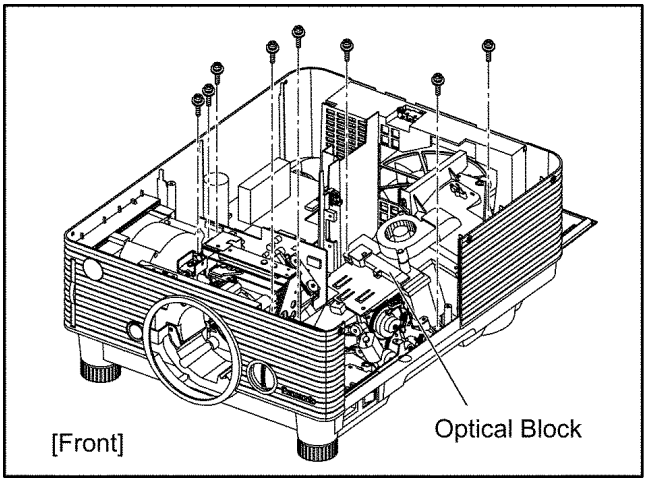
(6) Loosen the 2 screws fixing the lamp unit until they idle, hold the handles and take the lamp unit out.



(7) Remove the projection lens
1. Fully turn the projection Lens counterclockwise.
2. Turn the projection lens counterclockwise in addition while pressing the lens lock button.
3. Remove the projection lens.

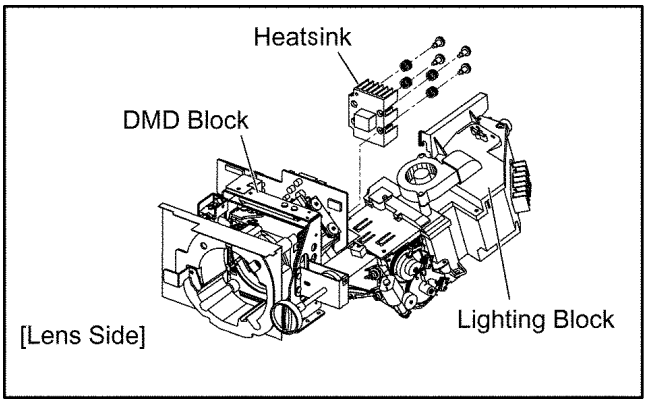


(8) Unscrew the 8 screws and remove the optical block.

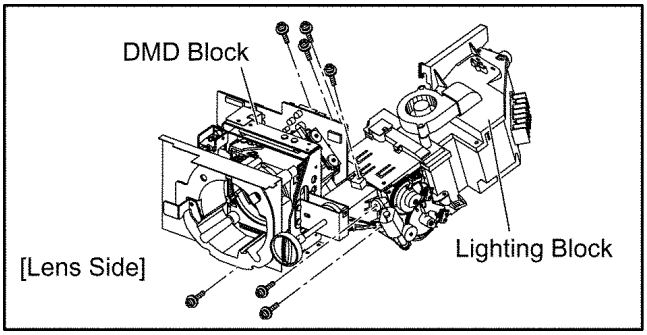


11.12. Removal of DMD Block and Lighting Block

(1) Remove the optical block according to the section 11.11. "Removal of Optical Block".
(2) Unscrew the 4 screws and remove the heatsink.

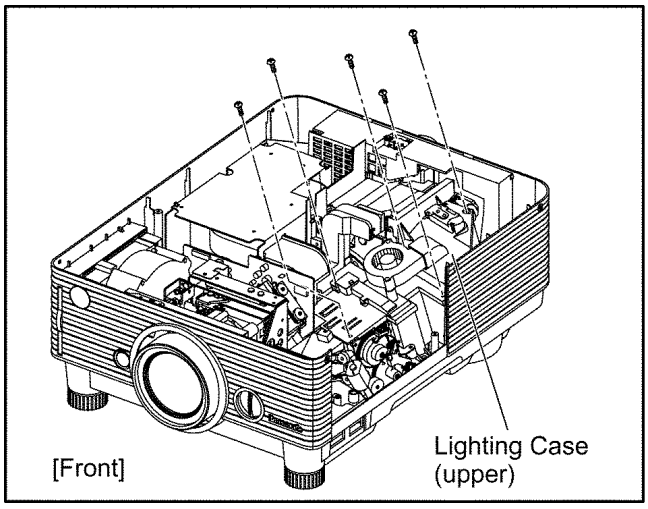


(2) Unscrew the 7 screws and separate the DMD block and lighting block.
Note:
・The DMD block periphery is composed of precise optical components. When disassembling or reassembling, work noting damage and the wound of the peripheral components.

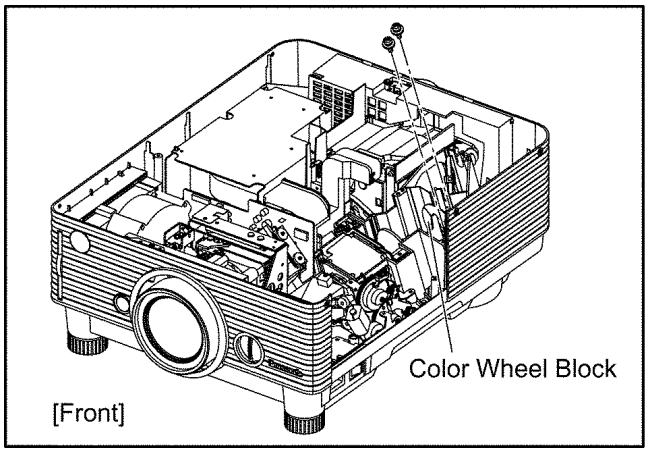


11.13. Removal of Color Wheel Block (Lighting Block)

(1) Remove the A-P.C.Board block according to the steps 1 through 5 in the section 11.3. "Removal of A-P.C.Board".
(2) Unscrew the 5 screws and remove the lighting case (upper).

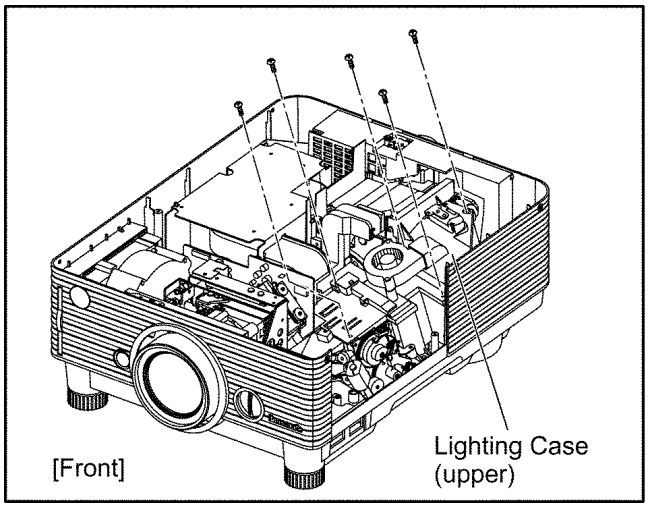


(3) Disconnect flexible cable from/to the color wheel block.
(4) Unscrew the 2 screws and remove the color wheel block.
Note:
・If the color wheel becomes dirty or damaged, the performance may be deteriorated. Work carefully enough in handling.

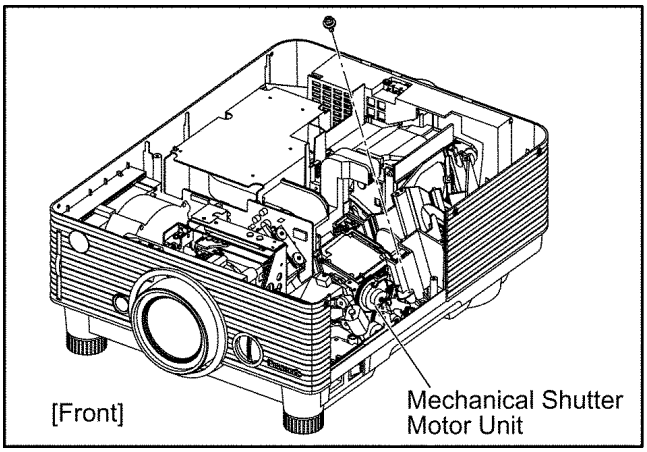


11.14. Removal of Mechanical Shutter Motor Unit

(1) Remove the A-P.C.Board block according to the steps 1 through 5 in the section 11.3. "Removal of A-P.C.Board".
(2) Unscrew the 5 screws and remove the lighting case (upper).

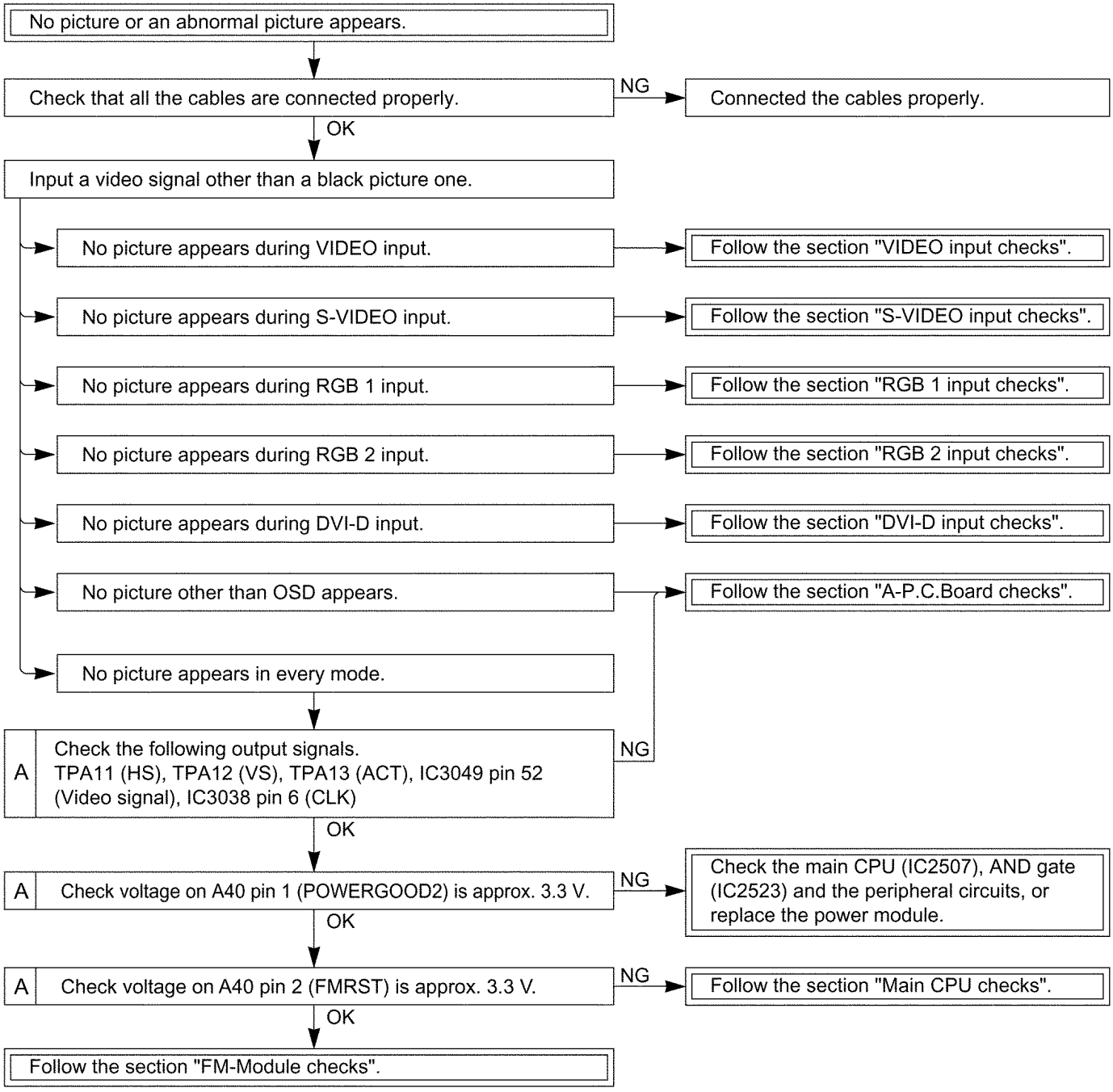


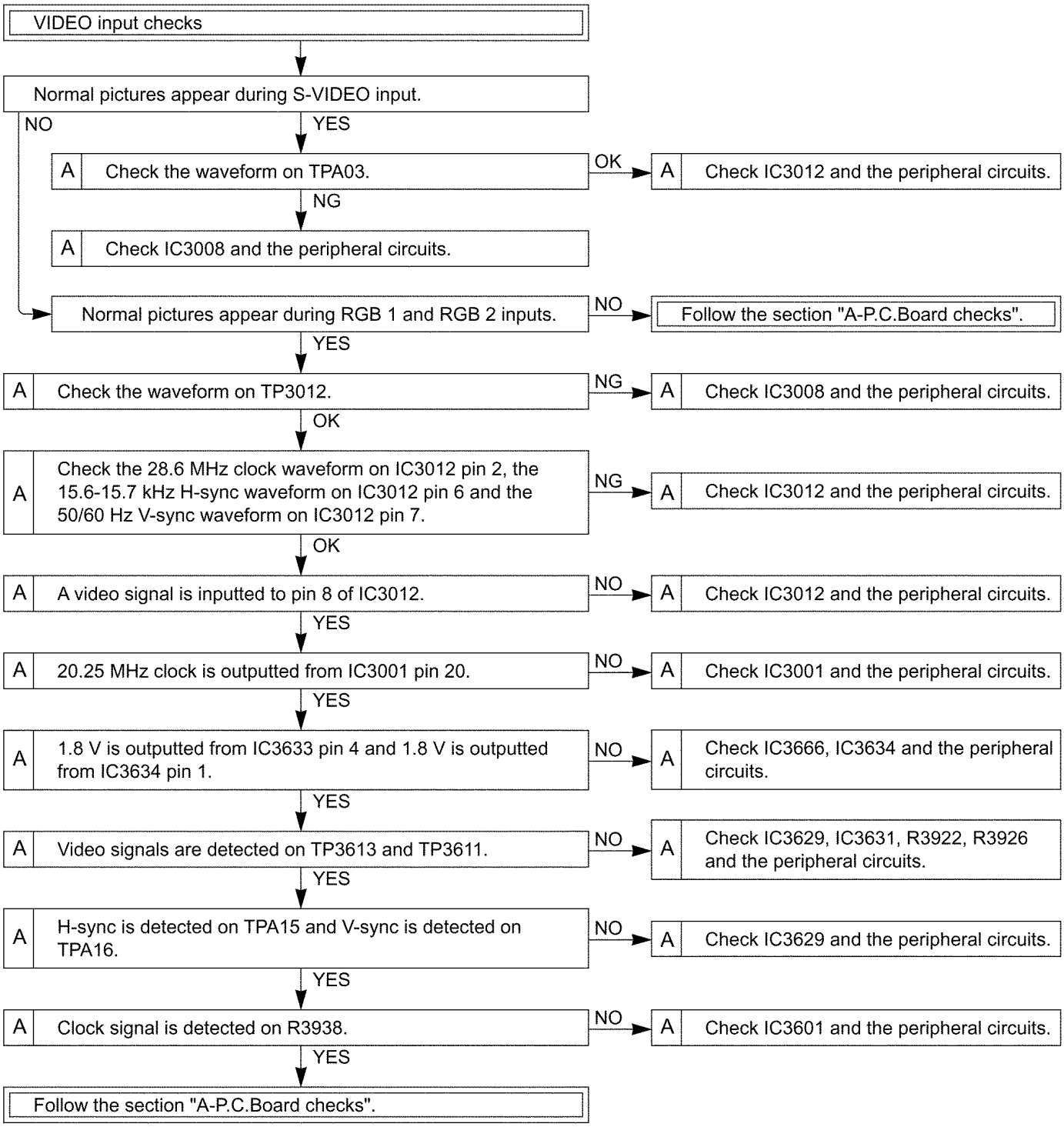
(3) Unscrew the 1 screw and remove the mechanical shutter motor unit.

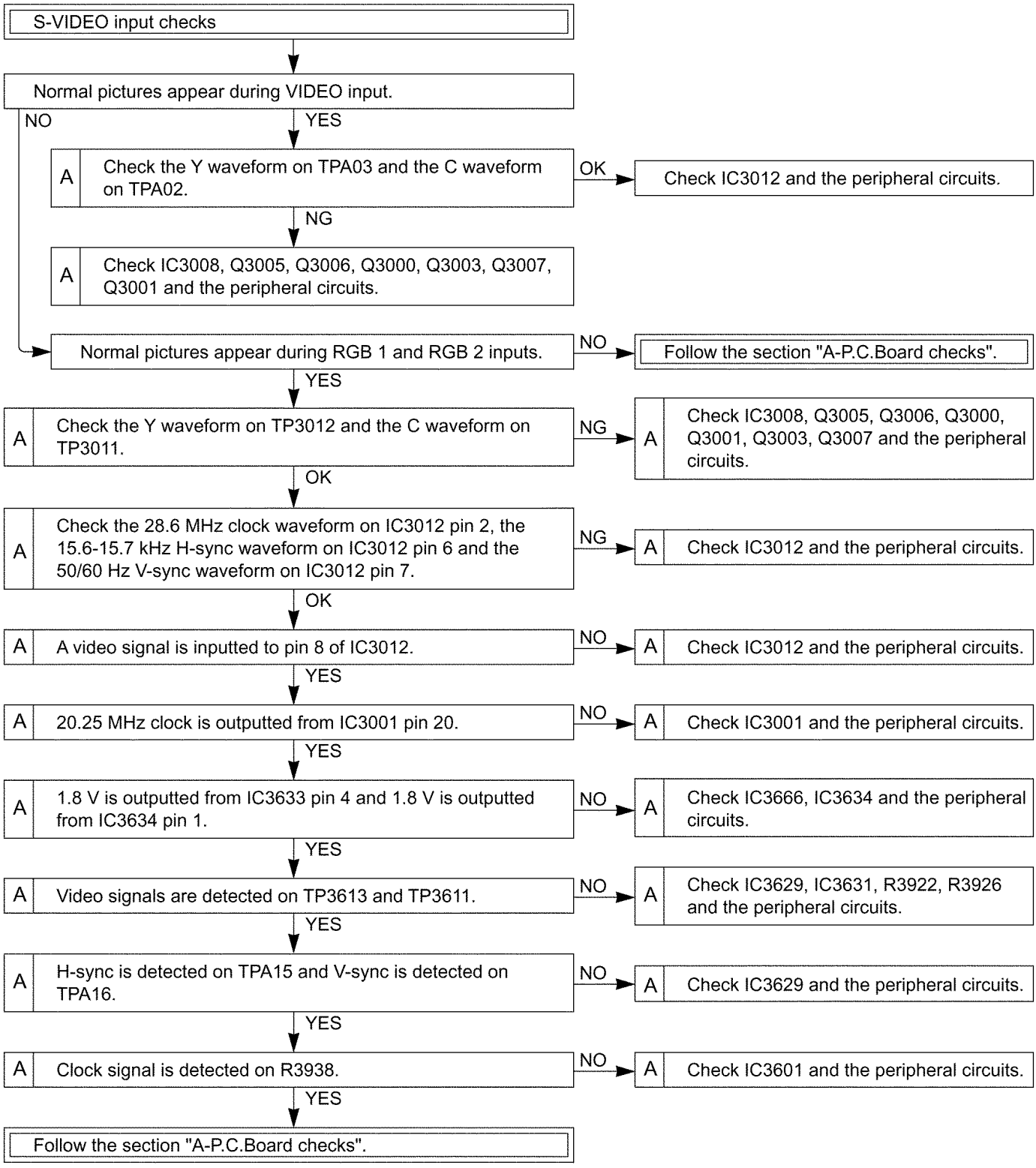


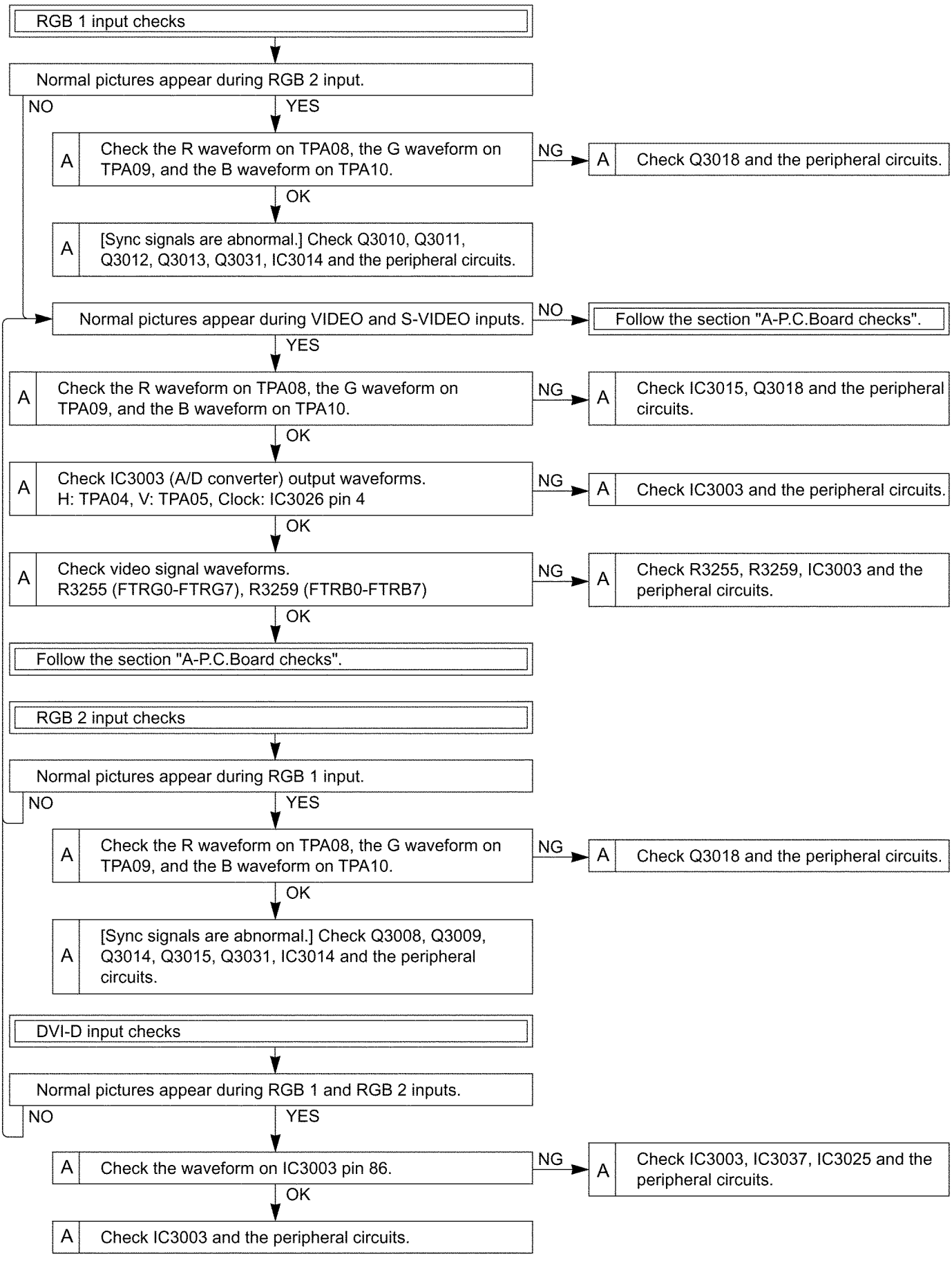
12 Troubleshooting

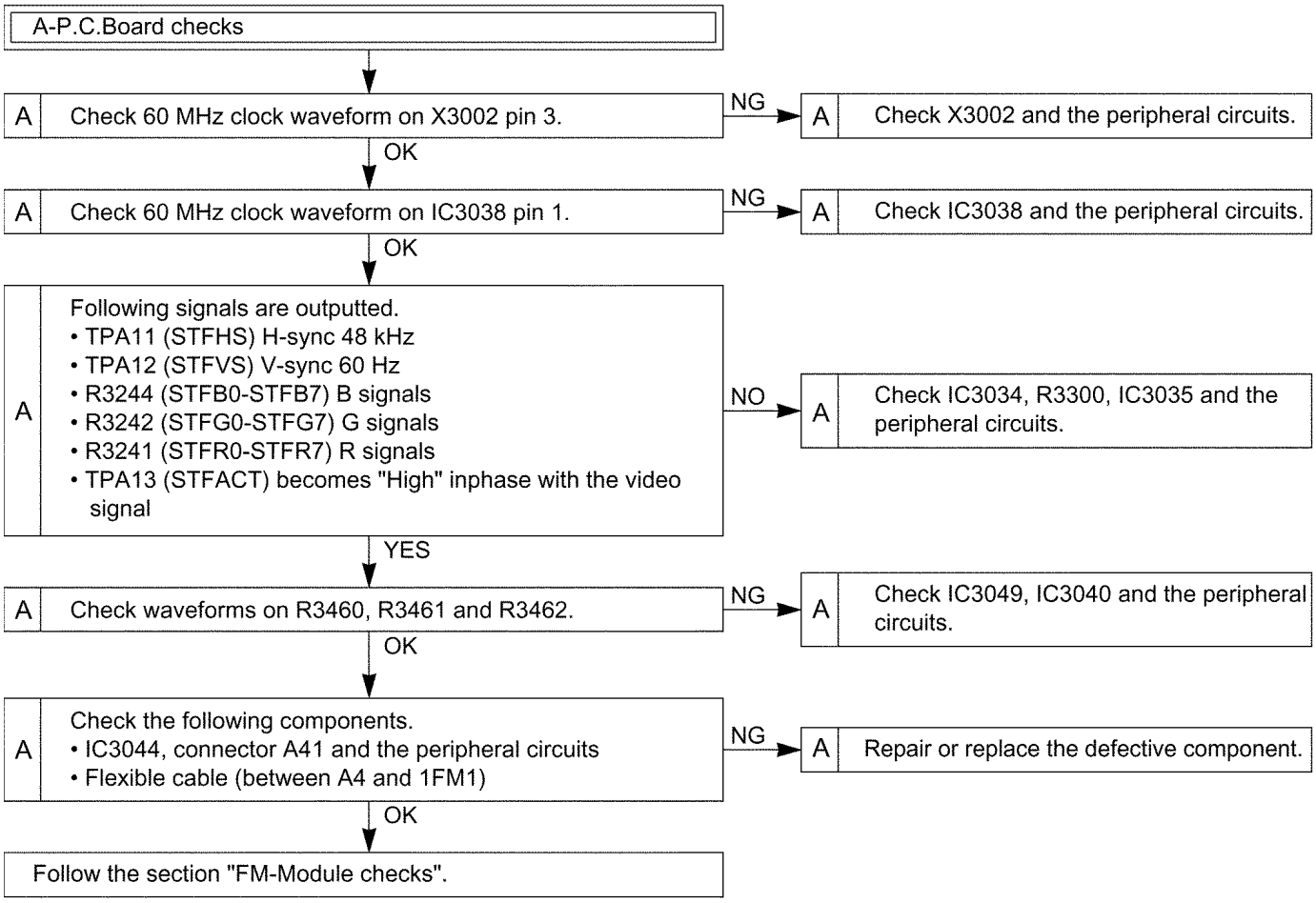
The alphabets (A, FM, etc.) in the left box of the inspection items indicate the names of P.C.Boards or modules to be checked.

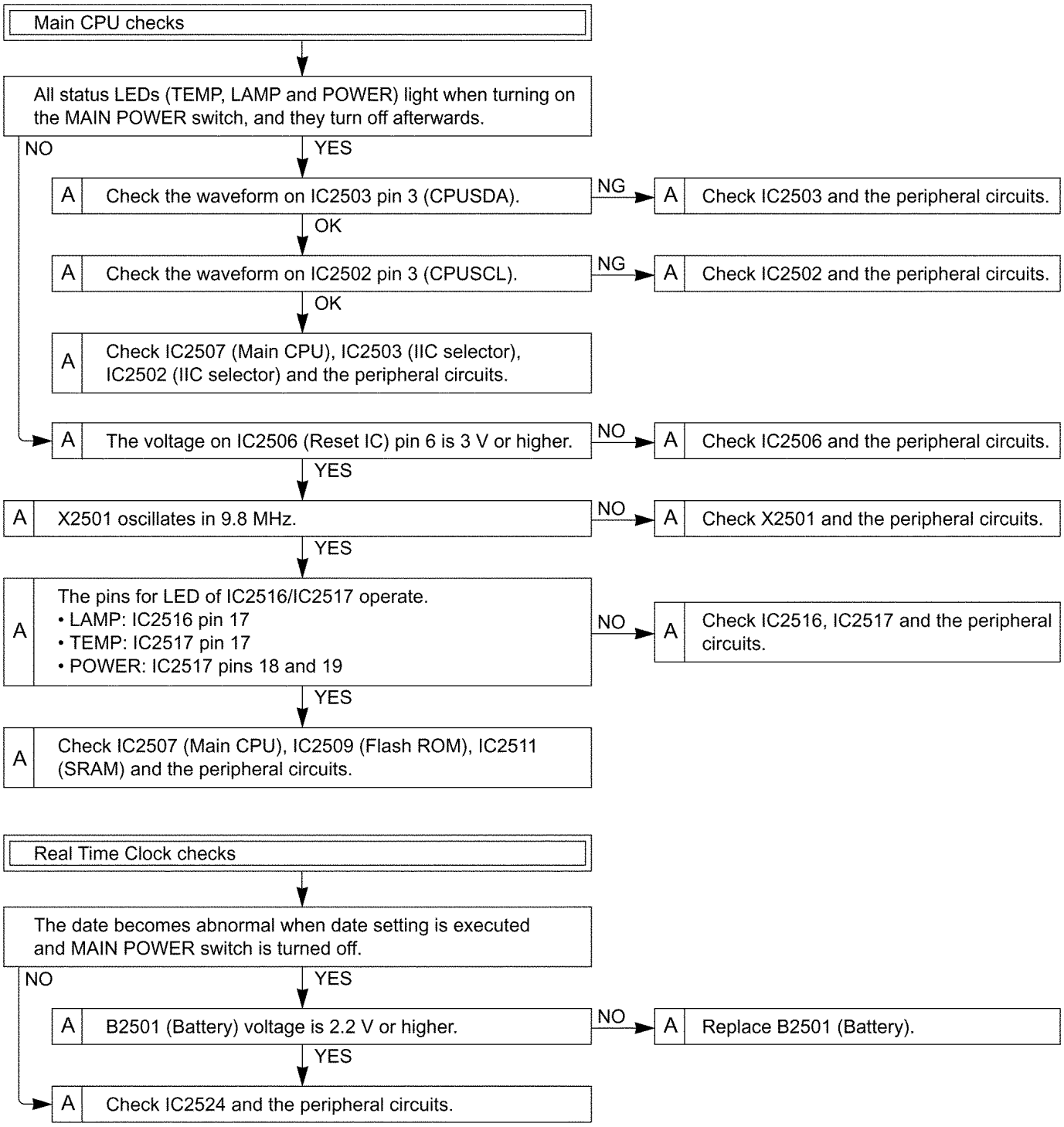

No picture or an abnormal picture appears.
Check that all the cables are connected properly.
NG
Connected the cables properly.
OK
Input a video signal other than a black picture one.
No picture appears during VIDEO input.
Follow the section "VIDEO input checks".
No picture appears during S-VIDEO input.
Follow the section "S-VIDEO input checks".
No picture appears during RGB 1 input.
Follow the section "RGB 1 input checks".
No picture appears during RGB 2 input.
Follow the section "RGB 2 input checks".
No picture appears during DVI-D input.
Follow the section "DVI-D input checks".
No picture other than OSD appears.
Follow the section "A-P.C.Board checks".
No picture appears in every mode.
A
Check the following output signals.
TPA11 (HS), TPA12 (VS), TPA13 (ACT), IC3049 pin 52 (Video signal), IC3038 pin 6 (CLK)
NG
OK
A
Check voltage on A40 pin 1 (POWERGOOD2) is approx. 3.3 V.
NG
Check the main CPU (IC2507), AND gate (IC2523) and the peripheral circuits, or replace the power module.
OK
A
Check voltage on A40 pin 2 (FMRST) is approx. 3.3 V.
NG
Follow the section "Main CPU checks".
OK
Follow the section "FM-Module checks".

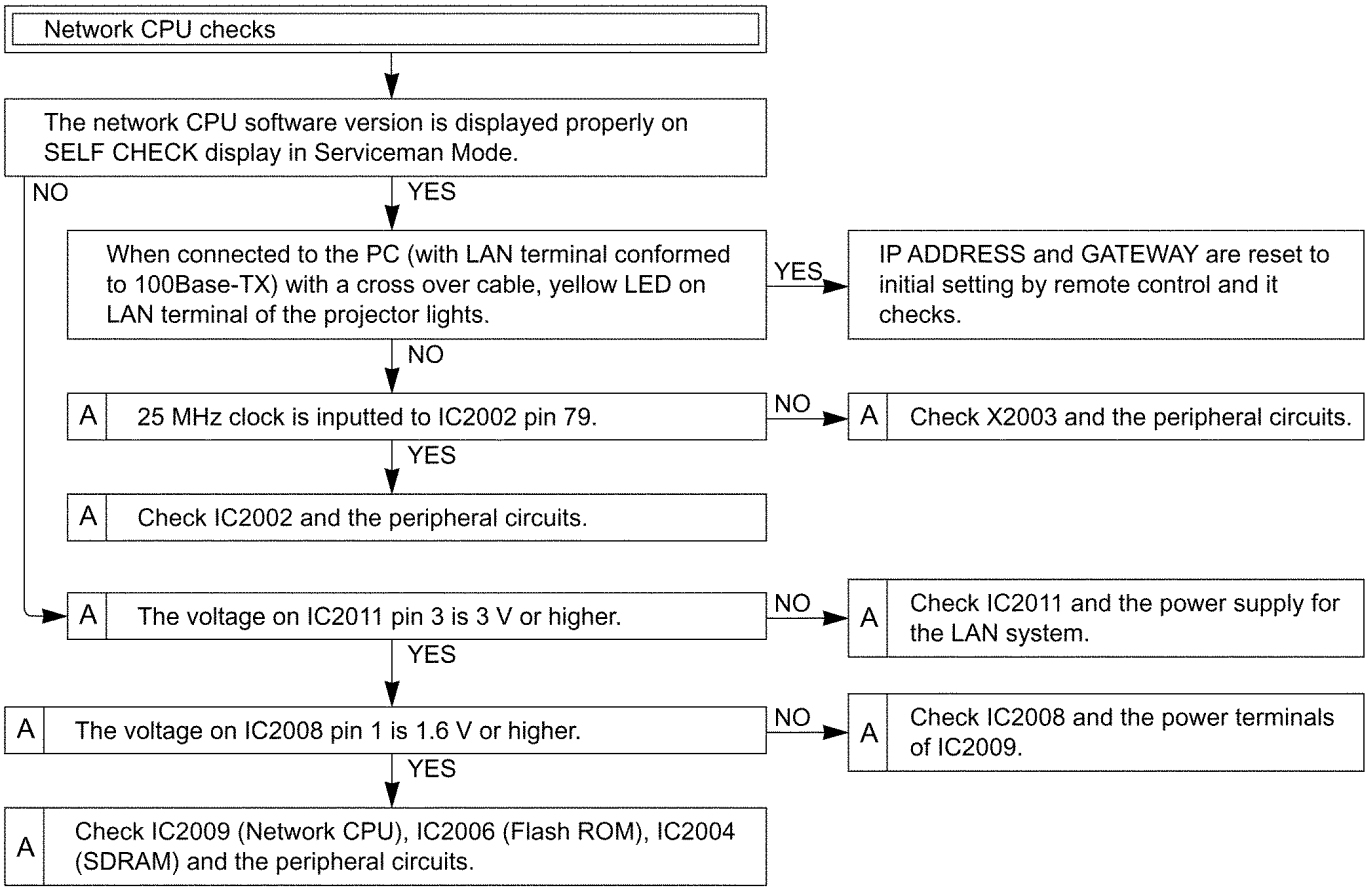

VIDEO input checks
Normal pictures appear during S-VIDEO input.
NO
YES
A
Check the waveform on TPA03.
OK
A
Check IC3012 and the peripheral circuits.
NG
A
Check IC3008 and the peripheral circuits.
Normal pictures appear during RGB 1 and RGB 2 inputs.
NO
Follow the section "A-P.C.Board checks".
YES
A
Check the waveform on TP3012.
NG
A
Check IC3008 and the peripheral circuits.
OK
A
Check the 28.6 MHz clock waveform on IC3012 pin 2, the 15.6-15.7 kHz H-sync waveform on IC3012 pin 6 and the 50/60 Hz V-sync waveform on IC3012 pin 7.
NG
A
Check IC3012 and the peripheral circuits.
OK
A
A video signal is inputted to pin 8 of IC3012.
NO
A
Check IC3012 and the peripheral circuits.
YES
A
20.25 MHz clock is outputted from IC3001 pin 20.
NO
A
Check IC3001 and the peripheral circuits.
YES
A
1.8 V is outputted from IC3633 pin 4 and 1.8 V is outputted from IC3634 pin 1.
NO
A
Check IC3666, IC3634 and the peripheral circuits.
YES
A
Video signals are detected on TP3613 and TP3611.
NO
A
Check IC3629, IC3631, R3922, R3926 and the peripheral circuits.
YES
A
H-sync is detected on TPA15 and V-sync is detected on TPA16.
NO
A
Check IC3629 and the peripheral circuits.
YES
A
Clock signal is detected on R3938.
NO
A
Check IC3601 and the peripheral circuits.
YES
Follow the section "A-P.C.Board checks".

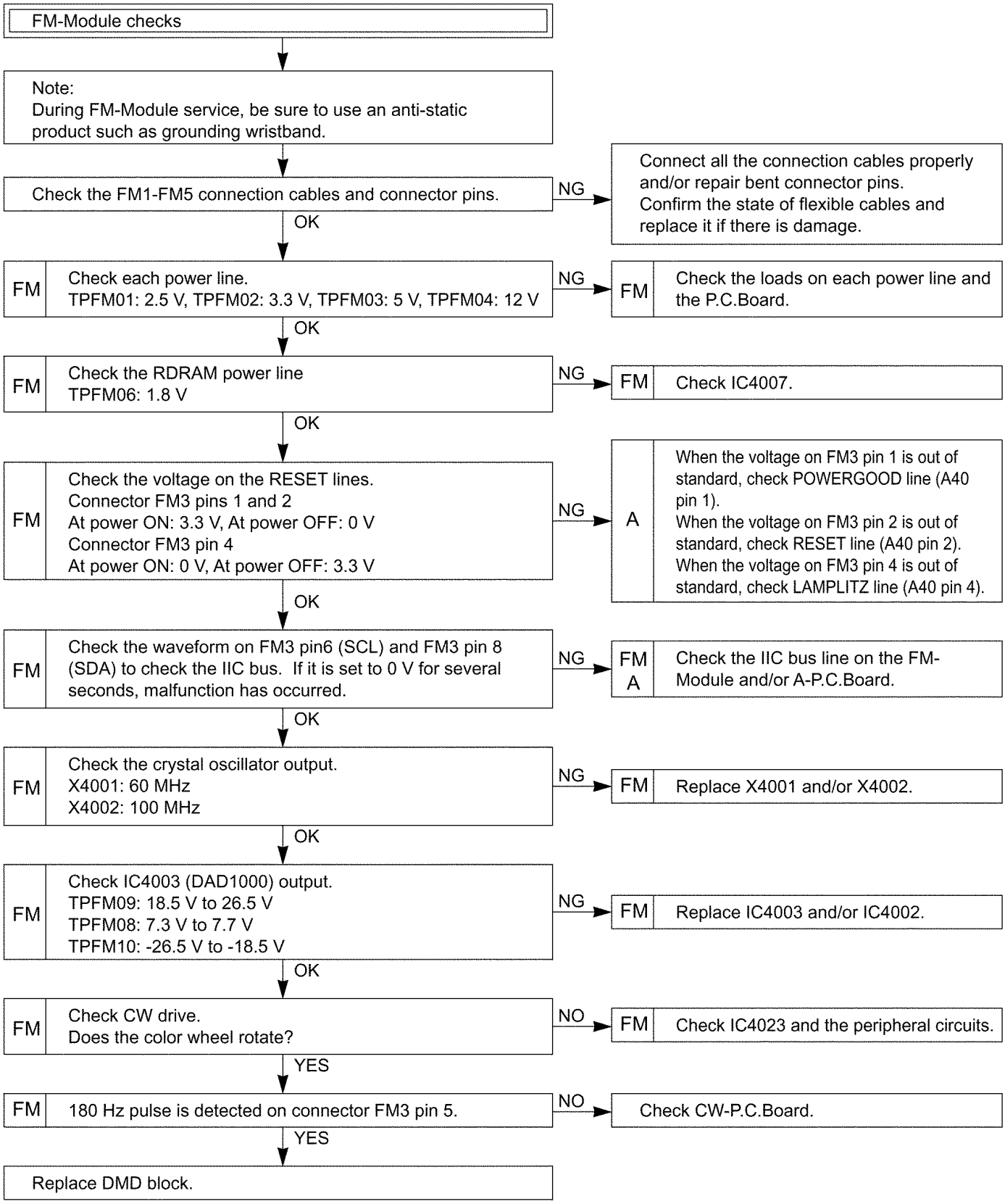

S-VIDEO input checks
Normal pictures appear during VIDEO input.
NO
YES
A
Check the Y waveform on TPA03 and the C waveform on TPA02.
OK
Check IC3012 and the peripheral circuits.
NG
A
Check IC3008, Q3005, Q3006, Q3000, Q3003, Q3007, Q3001 and the peripheral circuits.
Normal pictures appear during RGB 1 and RGB 2 inputs.
NO
Follow the section "A-P.C.Board checks".
YES
A
Check the Y waveform on TP3012 and the C waveform on TP3011.
NG
A
Check IC3008, Q3005, Q3006, Q3000, Q3001, Q3003, Q3007 and the peripheral circuits.
OK
A
Check the 28.6 MHz clock waveform on IC3012 pin 2, the 15.6-15.7 kHz H-sync waveform on IC3012 pin 6 and the 50/60 Hz V-sync waveform on IC3012 pin 7.
NG
A
Check IC3012 and the peripheral circuits.
OK
A
A video signal is inputted to pin 8 of IC3012.
NO
A
Check IC3012 and the peripheral circuits.
YES
A
20.25 MHz clock is outputted from IC3001 pin 20.
NO
A
Check IC3001 and the peripheral circuits.
YES
A
1.8 V is outputted from IC3633 pin 4 and 1.8 V is outputted from IC3634 pin 1.
NO
A
Check IC3666, IC3634 and the peripheral circuits.
YES
A
Video signals are detected on TP3613 and TP3611.
NO
A
Check IC3629, IC3631, R3922, R3926 and the peripheral circuits.
YES
A
H-sync is detected on TPA15 and V-sync is detected on TPA16.
NO
A
Check IC3629 and the peripheral circuits.
YES
A
Clock signal is detected on R3938.
NO
A
Check IC3601 and the peripheral circuits.
YES
Follow the section "A-P.C.Board checks".

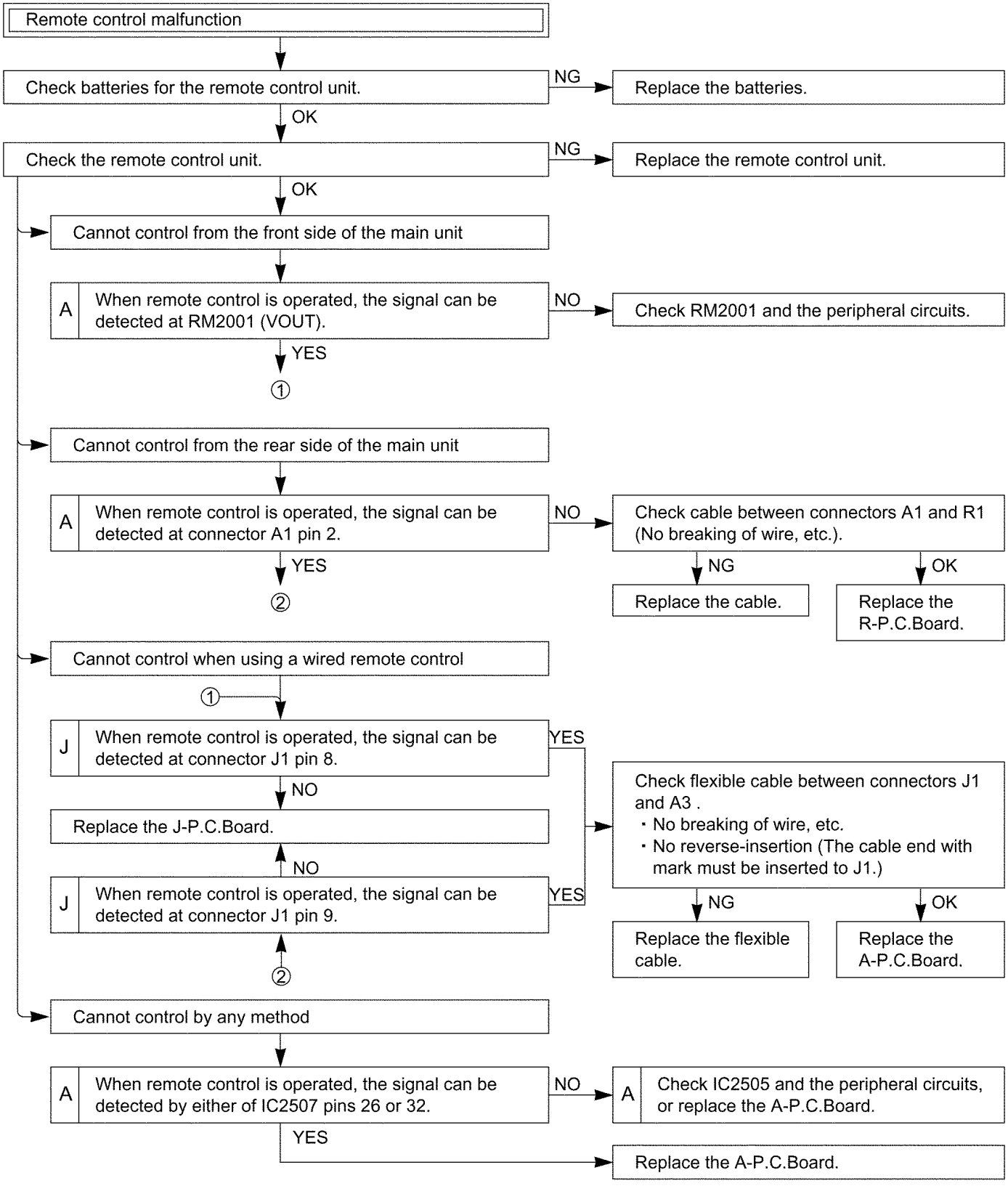

RGB 1 input checks
Normal pictures appear during RGB 2 input.
NO
YES
A
Check the R waveform on TPA08, the G waveform on TPA09, and the B waveform on TPA10.
NG
A
Check Q3018 and the peripheral circuits.
OK
A
[Sync signals are abnormal.] Check Q3010, Q3011, Q3012, Q3013, Q3031, IC3014 and the peripheral circuits.
Normal pictures appear during VIDEO and S-VIDEO inputs.
NO
Follow the section "A-P.C.Board checks".
YES
A
Check the R waveform on TPA08, the G waveform on TPA09, and the B waveform on TPA10.
NG
A
Check IC3015, Q3018 and the peripheral circuits.
OK
A
Check IC3003 (A/D converter) output waveforms.
H: TPA04, V: TPA05, Clock: IC3026 pin 4
NG
A
Check IC3003 and the peripheral circuits.
OK
A
Check video signal waveforms.
R3255 (FTRG0-FTRG7), R3259 (FTRB0-FTRB7)
NG
A
Check R3255, R3259, IC3003 and the peripheral circuits.
OK
Follow the section "A-P.C.Board checks".
RGB 2 input checks
Normal pictures appear during RGB 1 input.
NO
YES
A
Check the R waveform on TPA08, the G waveform on TPA09, and the B waveform on TPA10.
NG
A
Check Q3018 and the peripheral circuits.
OK
A
[Sync signals are abnormal.] Check Q3008, Q3009, Q3014, Q3015, Q3031, IC3014 and the peripheral circuits.
DVI-D input checks
Normal pictures appear during RGB 1 and RGB 2 inputs.
NO
YES
A
Check the waveform on IC3003 pin 86.
NG
A
Check IC3003, IC3037, IC3025 and the peripheral circuits.
OK
A
Check IC3003 and the peripheral circuits.

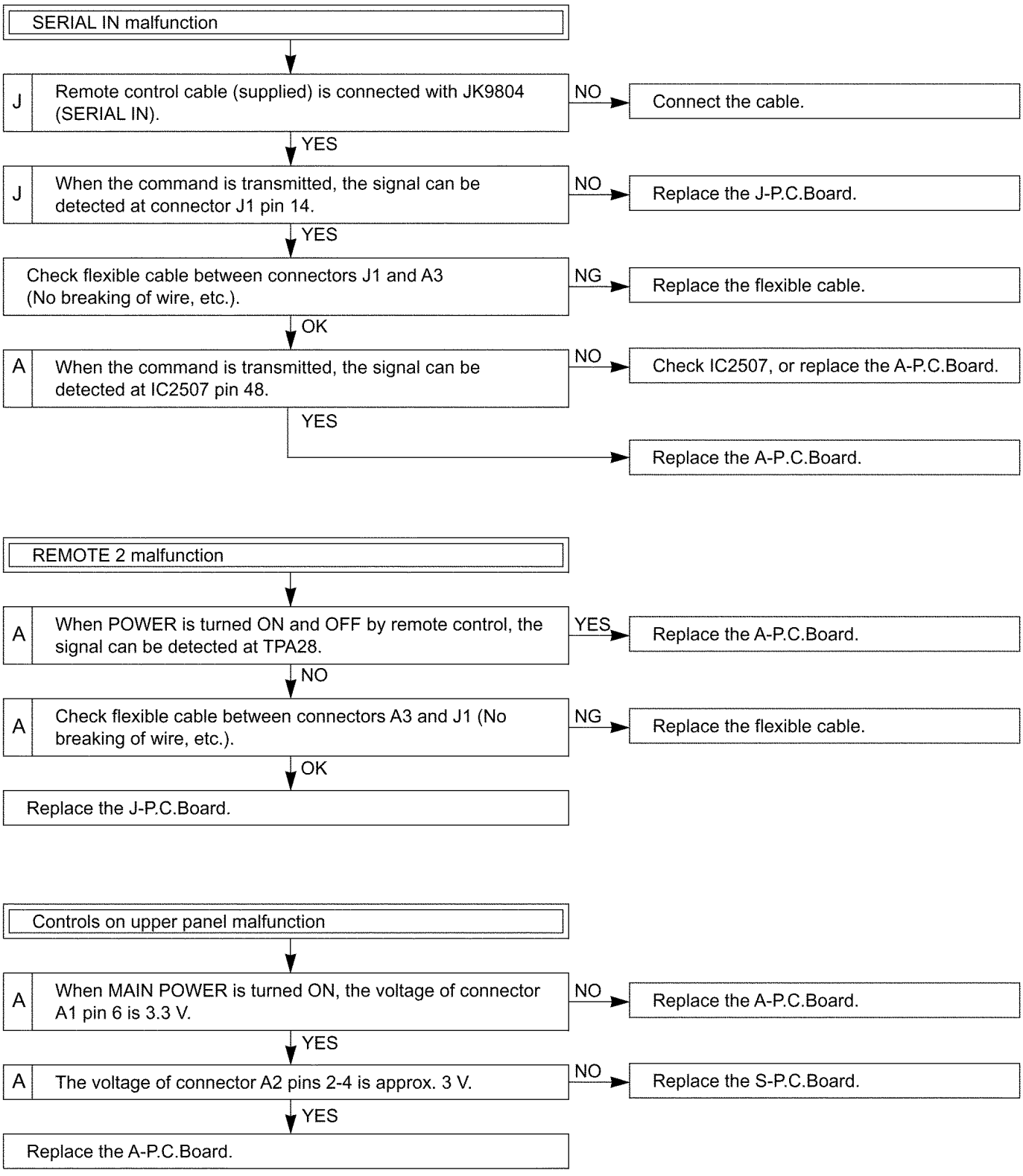

A-P.C.Board checks
A
Check 60 MHz clock waveform on X3002 pin 3.
NG
A
Check X3002 and the peripheral circuits.
OK
A
Check 60 MHz clock waveform on IC3038 pin 1.
NG
A
Check IC3038 and the peripheral circuits.
OK
A
Following signals are outputted.
• TPA11 (STFHS) H-sync 48 kHz
• TPA12 (STFVS) V-sync 60 Hz
• R3244 (STFB0-STFB7) B signals
• R3242 (STFG0-STFG7) G signals
• R3241 (STFR0-STFR7) R signals
• TPA13 (STFACT) becomes "High" inphase with the video signal
NO
A
Check IC3034, R3300, IC3035 and the peripheral circuits.
YES
A
Check waveforms on R3460, R3461 and R3462.
NG
A
Check IC3049, IC3040 and the peripheral circuits.
OK
A
Check the following components.
• IC3044, connector A41 and the peripheral circuits
• Flexible cable (between A4 and 1FM1)
NG
A
Repair or replace the defective component.
OK
Follow the section "FM-Module checks".

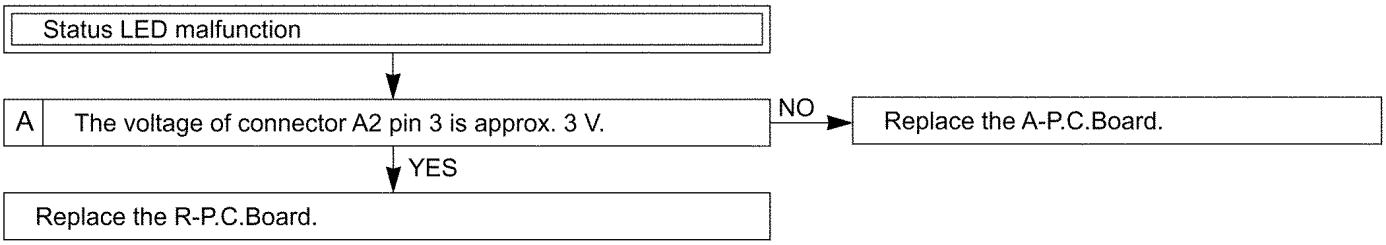

Main CPU checks
All status LEDs (TEMP, LAMP and POWER) light when turning on the MAIN POWER switch, and they turn off afterwards.
NO
YES
A
Check the waveform on IC2503 pin 3 (CPUSDA).
NG
A
Check IC2503 and the peripheral circuits.
OK
A
Check the waveform on IC2502 pin 3 (CPUSCL).
NG
A
Check IC2502 and the peripheral circuits.
OK
A
Check IC2507 (Main CPU), IC2503 (IIC selector), IC2502 (IIC selector) and the peripheral circuits.
A
The voltage on IC2506 (Reset IC) pin 6 is 3 V or higher.
NO
A
Check IC2506 and the peripheral circuits.
YES
A
X2501 oscillates in 9.8 MHz.
NO
A
Check X2501 and the peripheral circuits.
YES
A
The pins for LED of IC2516/IC2517 operate.
• LAMP: IC2516 pin 17
• TEMP: IC2517 pin 17
• POWER: IC2517 pins 18 and 19
NO
A
Check IC2516, IC2517 and the peripheral circuits.
YES
A
Check IC2507 (Main CPU), IC2509 (Flash ROM), IC2511 (SRAM) and the peripheral circuits.
Real Time Clock checks
The date becomes abnormal when date setting is executed and MAIN POWER switch is turned off.
NO
YES
A
B2501 (Battery) voltage is 2.2 V or higher.
NO
A
Replace B2501 (Battery).
YES
A
Check IC2524 and the peripheral circuits.

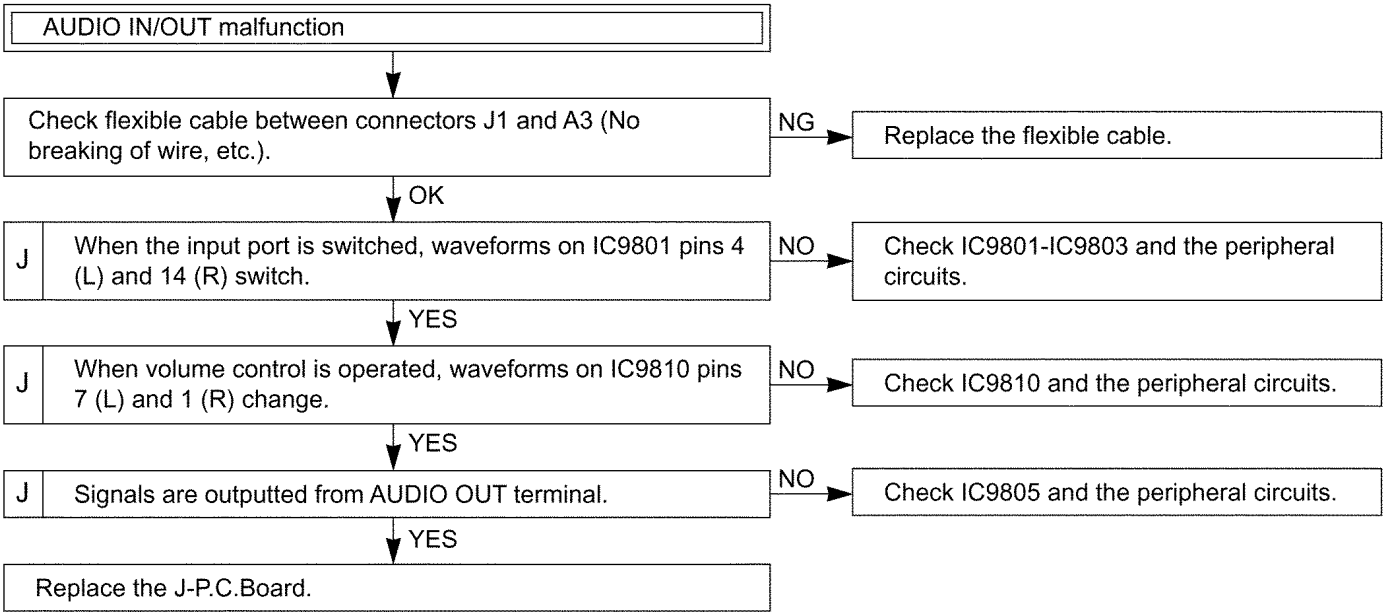

Network CPU checks
The network CPU software version is displayed properly on SELF CHECK display in Serviceman Mode.
NO
YES
When connected to the PC (with LAN terminal conformed to 100Base-TX) with a cross over cable, yellow LED on LAN terminal of the projector lights.
YES
IP ADDRESS and GATEWAY are reset to initial setting by remote control and it checks.
NO
A
25 MHz clock is inputted to IC2002 pin 79.
NO
A
Check X2003 and the peripheral circuits.
YES
A
Check IC2002 and the peripheral circuits.
A
The voltage on IC2011 pin 3 is 3 V or higher.
NO
A
Check IC2011 and the power supply for the LAN system.
YES
A
The voltage on IC2008 pin 1 is 1.6 V or higher.
NO
A
Check IC2008 and the power terminals of IC2009.
YES
A
Check IC2009 (Network CPU), IC2006 (Flash ROM), IC2004 (SDRAM) and the peripheral circuits.


FM-Module checks
Note:
During FM-Module service, be sure to use an anti-static product such as grounding wristband.
Check the FM1-FM5 connection cables and connector pins.
NG
Connect all the connection cables properly and/or repair bent connector pins.
Confirm the state of flexible cables and replace it if there is damage.
OK
FM
Check each power line.
TPFM01: 2.5 V, TPFM02: 3.3 V, TPFM03: 5 V, TPFM04: 12 V
NG
FM
Check the loads on each power line and the P.C.Board.
OK
FM
Check the RDRAM power line
TPFM06: 1.8 V
NG
FM
Check IC4007.
OK
FM
Check the voltage on the RESET lines.
Connector FM3 pins 1 and 2
At power ON: 3.3 V, At power OFF: 0 V
Connector FM3 pin 4
At power ON: 0 V, At power OFF: 3.3 V
NG
A
When the voltage on FM3 pin 1 is out of standard, check POWERGOOD line (A40 pin 1).
When the voltage on FM3 pin 2 is out of standard, check RESET line (A40 pin 2).
When the voltage on FM3 pin 4 is out of standard, check LAMPLITZ line (A40 pin 4).
OK
FM
Check the waveform on FM3 pin6 (SCL) and FM3 pin 8 (SDA) to check the IIC bus. If it is set to 0 V for several seconds, malfunction has occurred.
NG
FM
A
Check the IIC bus line on the FM-Module and/or A-P.C.Board.
OK
FM
Check the crystal oscillator output.
X4001: 60 MHz
X4002: 100 MHz
NG
FM
Replace X4001 and/or X4002.
OK
FM
Check IC4003 (DAD1000) output.
TPFM09: 18.5 V to 26.5 V
TPFM08: 7.3 V to 7.7 V
TPFM10: -26.5 V to -18.5 V
NG
FM
Replace IC4003 and/or IC4002.
OK
FM
Check CW drive.
Does the color wheel rotate?
NO
FM
Check IC4023 and the peripheral circuits.
YES
FM
180 Hz pulse is detected on connector FM3 pin 5.
NO
Check CW-P.C.Board.
YES
Replace DMD block.


Remote control malfunction
Check batteries for the remote control unit.
NG
Replace the batteries.
OK
Check the remote control unit.
NG
Replace the remote control unit.
OK
Cannot control from the front side of the main unit
A
When remote control is operated, the signal can be detected at RM2001 (VOUT).
NO
Check RM2001 and the peripheral circuits.
YES
①
Cannot control from the rear side of the main unit
A
When remote control is operated, the signal can be detected at connector A1 pin 2.
NO
Check cable between connectors A1 and R1 (No breaking of wire, etc.).
NG
OK
Replace the cable.
Replace the R-P.C.Board.
YES
②
Cannot control when using a wired remote control
①
J
When remote control is operated, the signal can be detected at connector J1 pin 8.
YES
NO
Replace the J-P.C.Board.
NO
J
When remote control is operated, the signal can be detected at connector J1 pin 9.
YES
Check flexible cable between connectors J1 and A3 .
・No breaking of wire, etc.
・No reverse-insertion (The cable end with mark must be inserted to J1.)
NG
OK
Replace the flexible cable.
Replace the A-P.C.Board.
②
Cannot control by any method
A
When remote control is operated, the signal can be detected by either of IC2507 pins 26 or 32.
NO
A
Check IC2505 and the peripheral circuits, or replace the A-P.C.Board.
YES
Replace the A-P.C.Board.

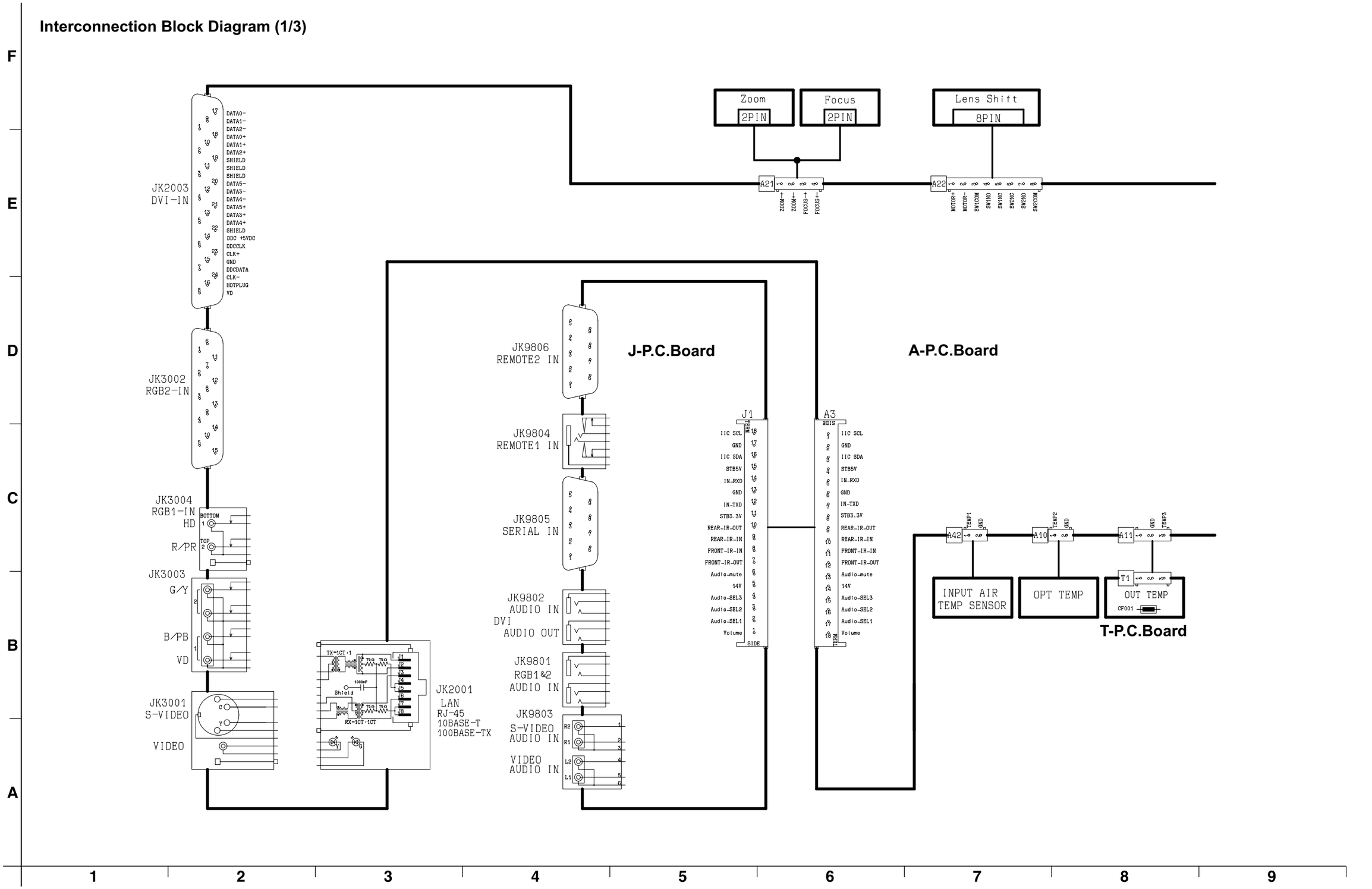

SERIAL IN malfunction
J
Remote control cable (supplied) is connected with JK9804 (SERIAL IN).
NO
Connect the cable.
YES
J
When the command is transmitted, the signal can be detected at connector J1 pin 14.
NO
Replace the J-P.C.Board.
YES
Check flexible cable between connectors J1 and A3 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
A
When the command is transmitted, the signal can be detected at IC2507 pin 48.
NO
Check IC2507, or replace the A-P.C.Board.
YES
Replace the A-P.C.Board.
REMOTE 2 malfunction
A
When POWER is turned ON and OFF by remote control, the signal can be detected at TPA28.
YES
Replace the A-P.C.Board.
NO
A
Check flexible cable between connectors A3 and J1 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
Replace the J-P.C.Board.
Controls on upper panel malfunction
A
When MAIN POWER is turned ON, the voltage of connector A1 pin 6 is 3.3 V.
NO
Replace the A-P.C.Board.
YES
A
The voltage of connector A2 pins 2-4 is approx. 3 V.
NO
Replace the S-P.C.Board.
YES
Replace the A-P.C.Board.


Status LED malfunction
A
The voltage of connector A2 pin 3 is approx. 3 V.
NO
Replace the A-P.C.Board.
YES
Replace the R-P.C.Board.

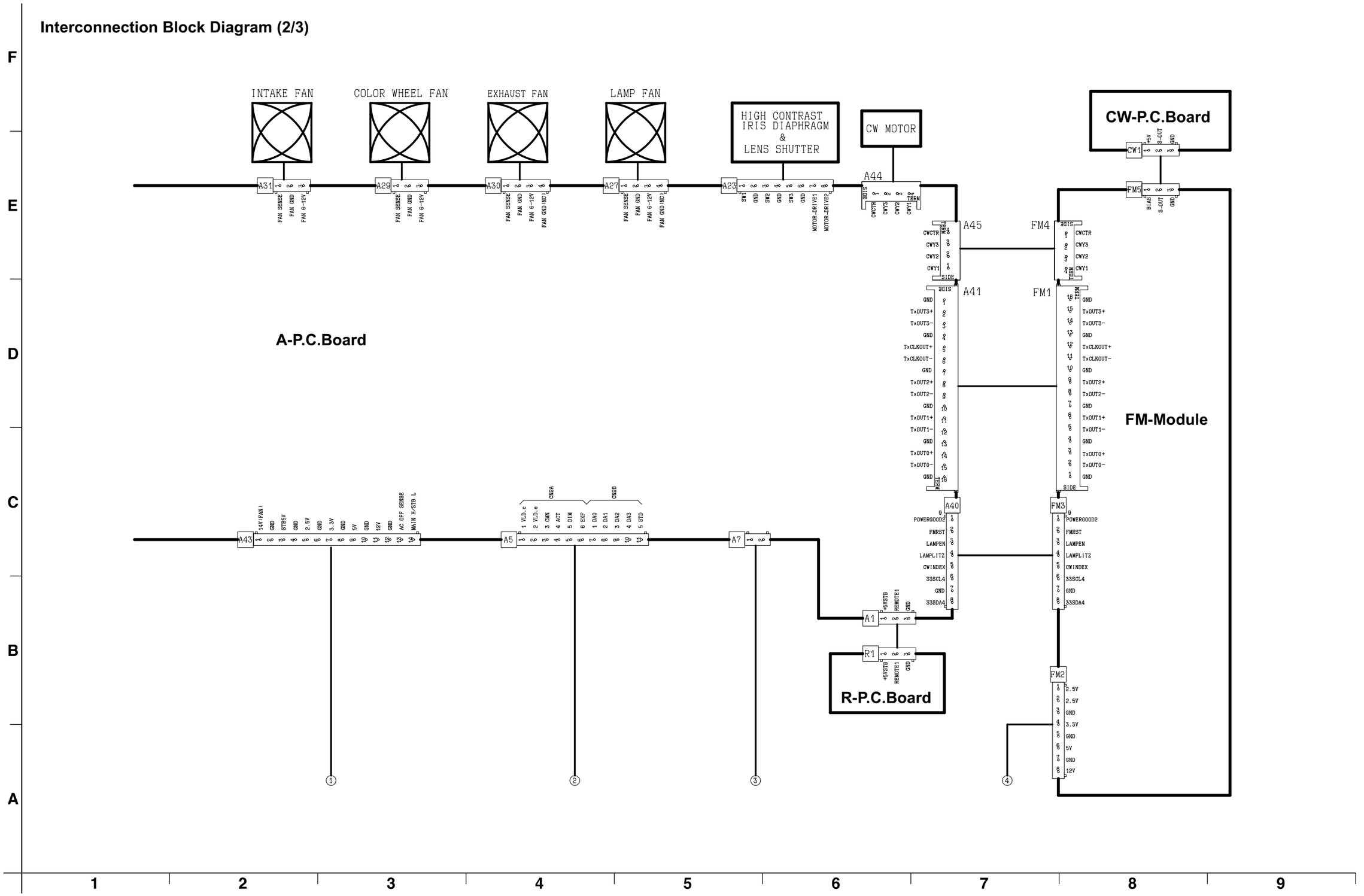

AUDIO IN/OUT malfunction
Check flexible cable between connectors J1 and A3 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
J
When the input port is switched, waveforms on IC9801 pins 4 (L) and 14 (R) switch.
NO
Check IC9801-IC9803 and the peripheral circuits.
YES
J
When volume control is operated, waveforms on IC9810 pins 7 (L) and 1 (R) change.
NO
Check IC9810 and the peripheral circuits.
YES
J
Signals are outputted from AUDIO OUT terminal.
NO
Check IC9805 and the peripheral circuits.
YES
Replace the J-P.C.Board.

13 Interconnection Block Diagram

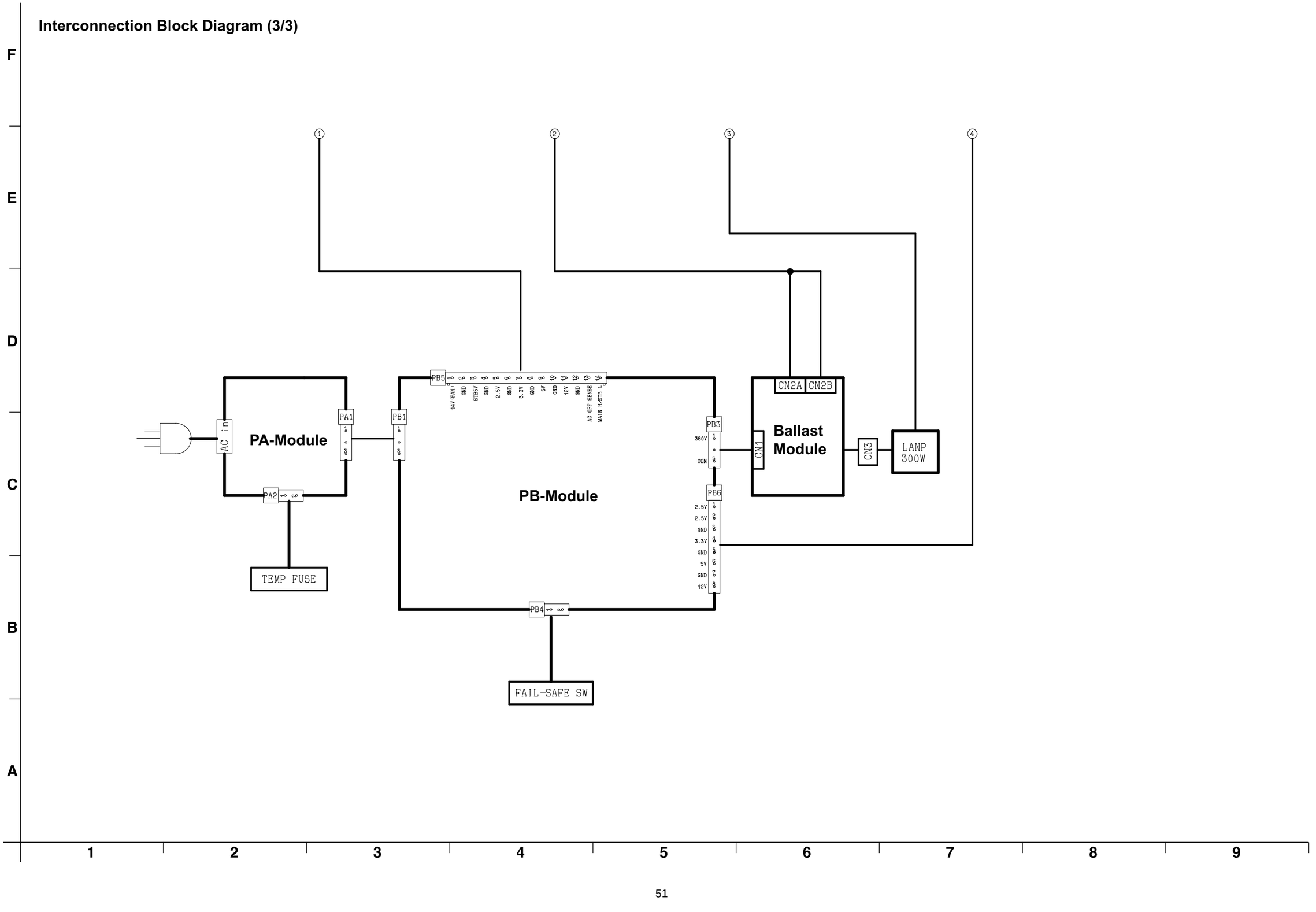
13.1. Interconnection Block Diagram (1/3)



13.2. Interconnection Block Diagram (2/3)

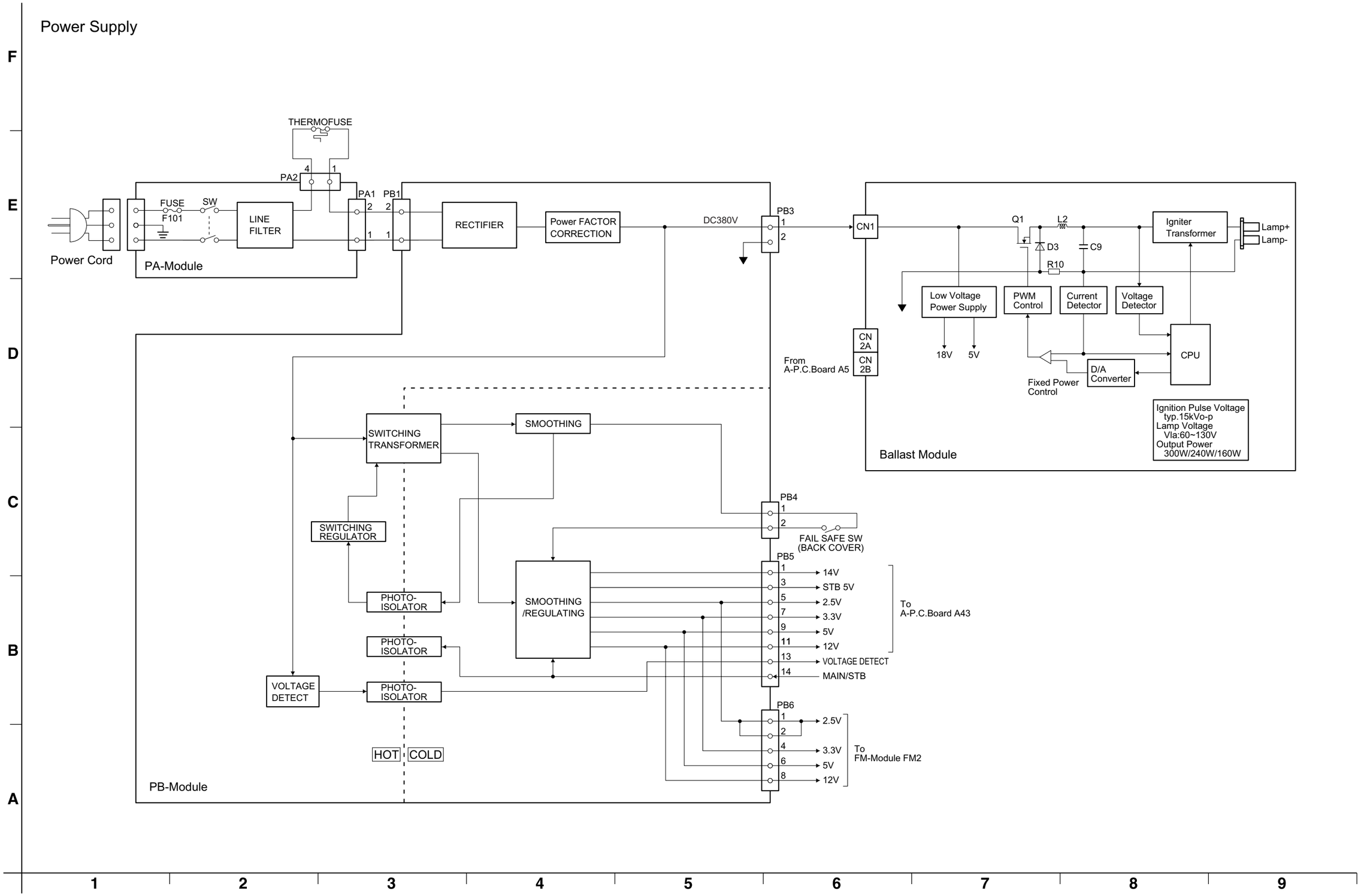


13.3. Interconnection Block Diagram (3/3)



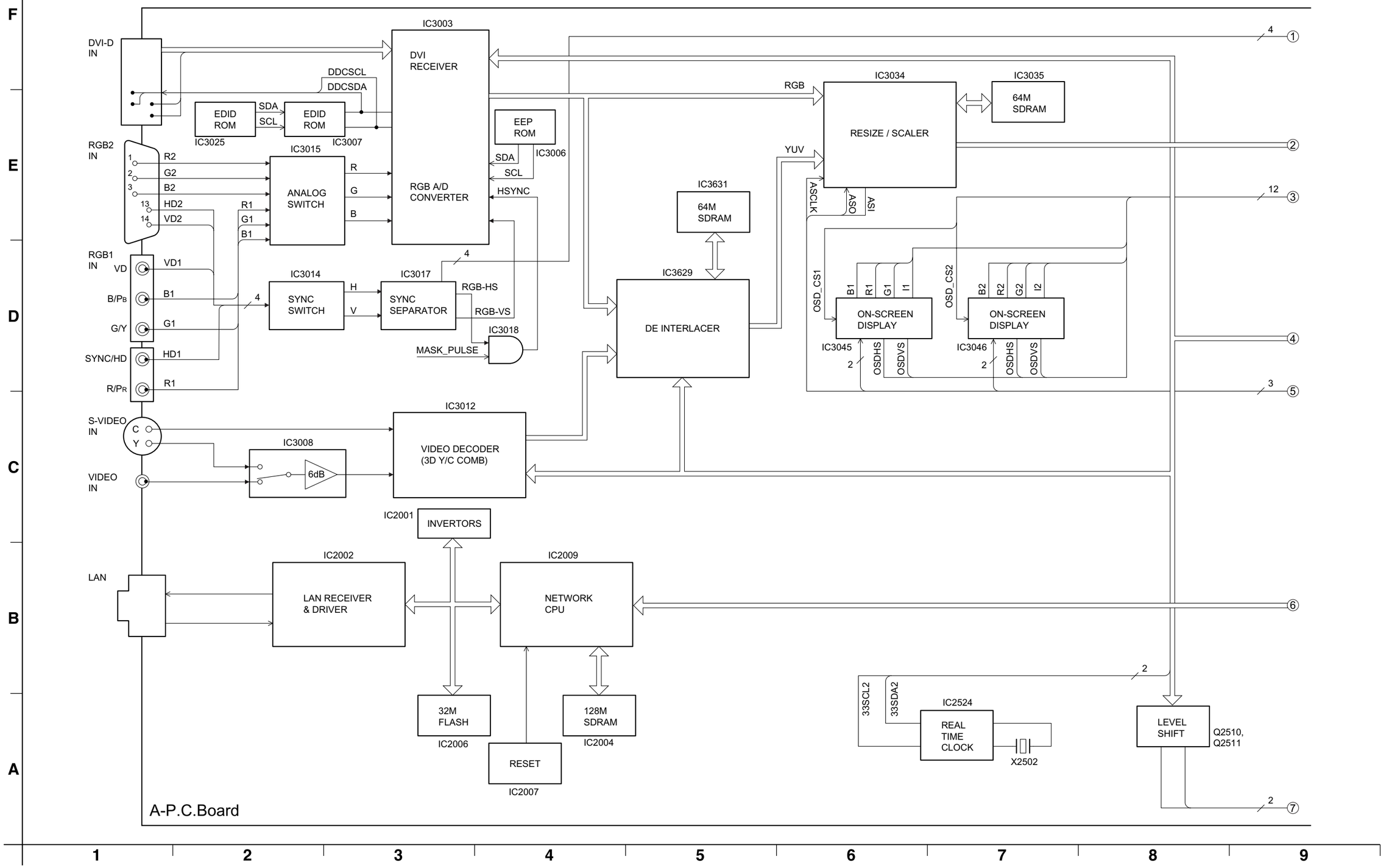
14 Block Diagram

14.1. Power Supply



14.2. Signal Processing (1/2)

Signal Processing (1/2)



14.3. Signal Processing (2/2)

Signal Processing (2/2)

A-P.C.Board

FM-Module

R-P.C.Board

J-P.C.Board

IC3049

(FPGA)
VIDEO SIGNAL PROCESSOR,
SYNC SIGNAL PROCESSOR,
TEST PATTEN GENERATOR

HSTATE
VSTATE
HPOL
VPOL

B1
R1
G1
I1
B2
R2
G2
I2

OSD_CS1
OSD_CS2
OSDHS
OSDVS
ASO
ASCLK
ASI
AUDIO_SEL3
AUDIO_SEL2
AUDIO_SEL1

CWINDEX

A41
A40
FM1
FM3

IC4001
LVDS
RECEIVER

IC4004
RDRAM

IC4006
FLASH
MEMORY

IC4002
DMD DRIVE
PROCESSOR

IC4008
DMD
0.7 inch
XGA DDR

IC4010
BUFFERS

IC4003
DMD POWER
& RESET
PROCESSOR

POWERGOOD2
FMRST
LAMPLITZ

(REAR)
R1

A1
REMOTE_RE1

A3
AUDIO_VR
(from IC3608)

J1

IC9802
IC9803
IC9810
AUDIO
VOLUME
CONTROL
IC9801

VIDEO
S-VIDEO
AUDIO IN
RGB1
RGB2
DVI
AUDIO
OUT

AUDIO
AMP
IC9805

MUTE
Q9807-
Q9812

IC9808
5V

REMOTE1
IN

IC9809
BUFFER

IC9806
RS-232C
RECEIVER
& DRIVER

RS-232C

IIC SDA
IIC SCL

IC9807
I/O

REMOTE2
IN

LAMPLITZ

CPUIICSEL1
CPUIICSEL2
CPUIICSEL3

IIC
SWITCHES

IC2502,
IC2503

256K
EEPROM
IC2508

IC2507
MAIN CPU

CPUKEY1
CPUKEY2
SWITCHES

CPUIR_OUT
(FRONT)

S-MUTE

IC2505
BUFFERS

ASO
ASCLK
REMOTE_IN
CPUASO
CPUASCLK

REMOTE_RE2
CPU232C_IN_TXD
CPU232C_IN_RXD
IIC SDA
IIC SCL

IC2522
EXT.
I/O

SDA
SCL

RESET
IC2506

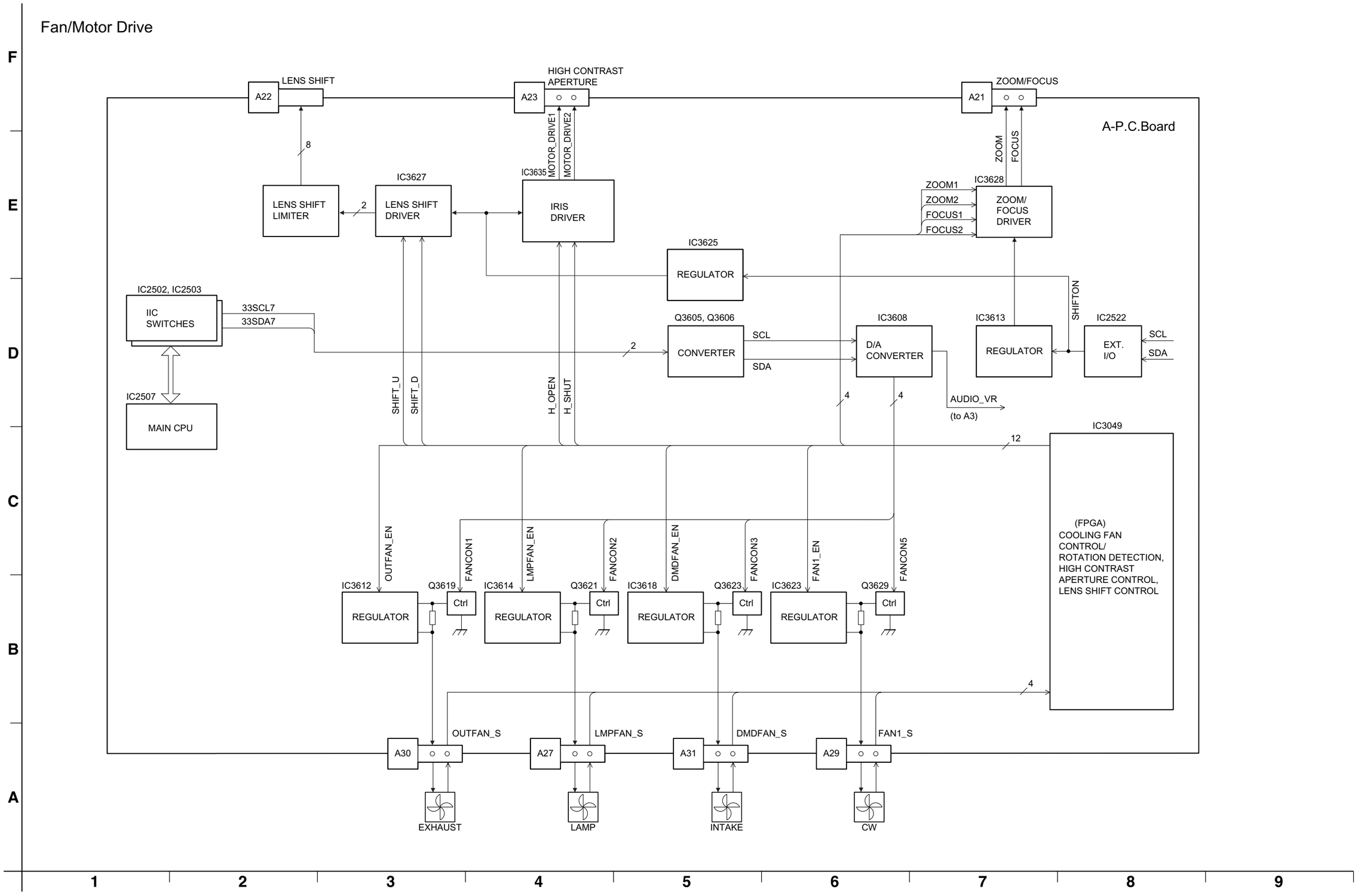
8M
FLASH
IC2509

256K
SRAM
IC2511

EXT.
OUTPORT
IC2516,
IC2517

14.4. Fan/Motor Drive

Fan/Motor Drive



15 Schematic Diagram

Schematic Diagram for Model PT-D3500U

IMPORTANT SAFETY NOTICE

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS.
WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

Schematic Diagram for Model PT-D3500E

Important Safety Notice

Components identified by the international symbol ⚠ have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified ones.

Notes:

1. **Resistor**

   All the resistors are carbon 1/4W resistors, unless marked as follows: The unit of resistance is an OHM [Ω] (K=1 000 M=1 000 000).

   ○ : Nonflammable
   ⊠ : Metal Oxide
   △ : Solid
   ◎ : Metal Film
   ⊘ : Wire Wound
   ⊗ : Fuse

2. **Capacitor**

   ⊗ : Temperature Compensation
   ⧺ : Electrolytic
   Ⓜ : Polyester
   NP ⧺ : Bipolar
   ⓜ : Metalized Polyester
   Ⓣ : Dipped Tantalum
   ⊠ : Polypropylene
   Ⓩ : Z-Type

3. **Coil**

   The unit of inductance is a H, unless otherwise noted.

4. **Test Point**

   ● : Test Point

5. **Voltage Measurement**

   The voltage is measured by an electronic voltmeter receiving the colorbar signal when all the customer's controls are set to the standard condition.

6. **Color code for the links between diagrams and circuit boards**

From/To		To/From	Color code
Block diagram	↔	Schematic diagram	Magenta
Schematic diagram	↔	Schematic diagram	Green
Schematic diagram	↔	Circuit boards	Yellow
Schematic diagram	↔	Waveforms	Cyan (Light blue)

7. **HOT and COLD indications**

   The power circuit board contains a circuit area using a separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:

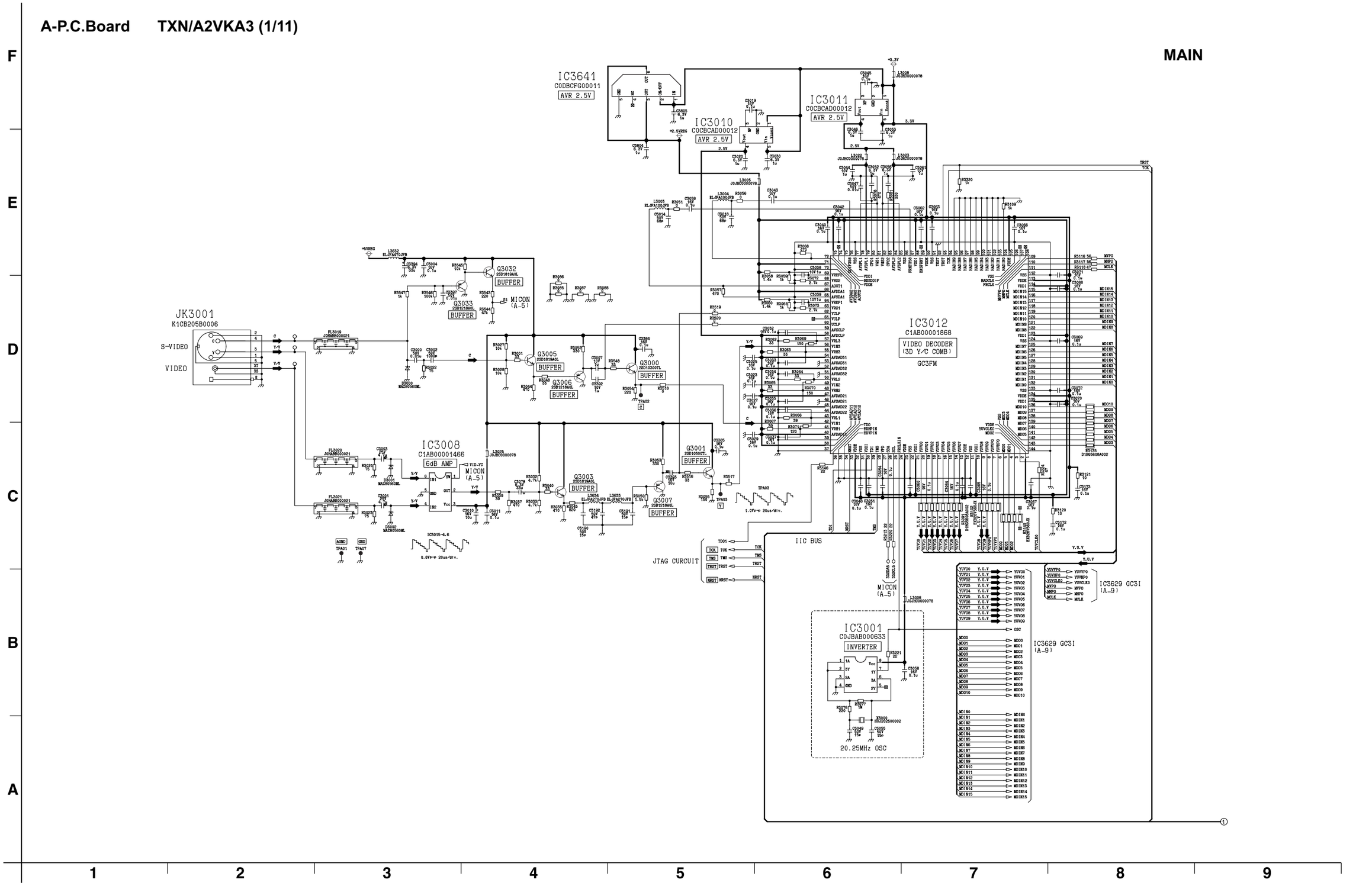
8. **This schematic diagram is the latest at the time of printing and the subject to change without notice.**

Precautions:

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow.Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.

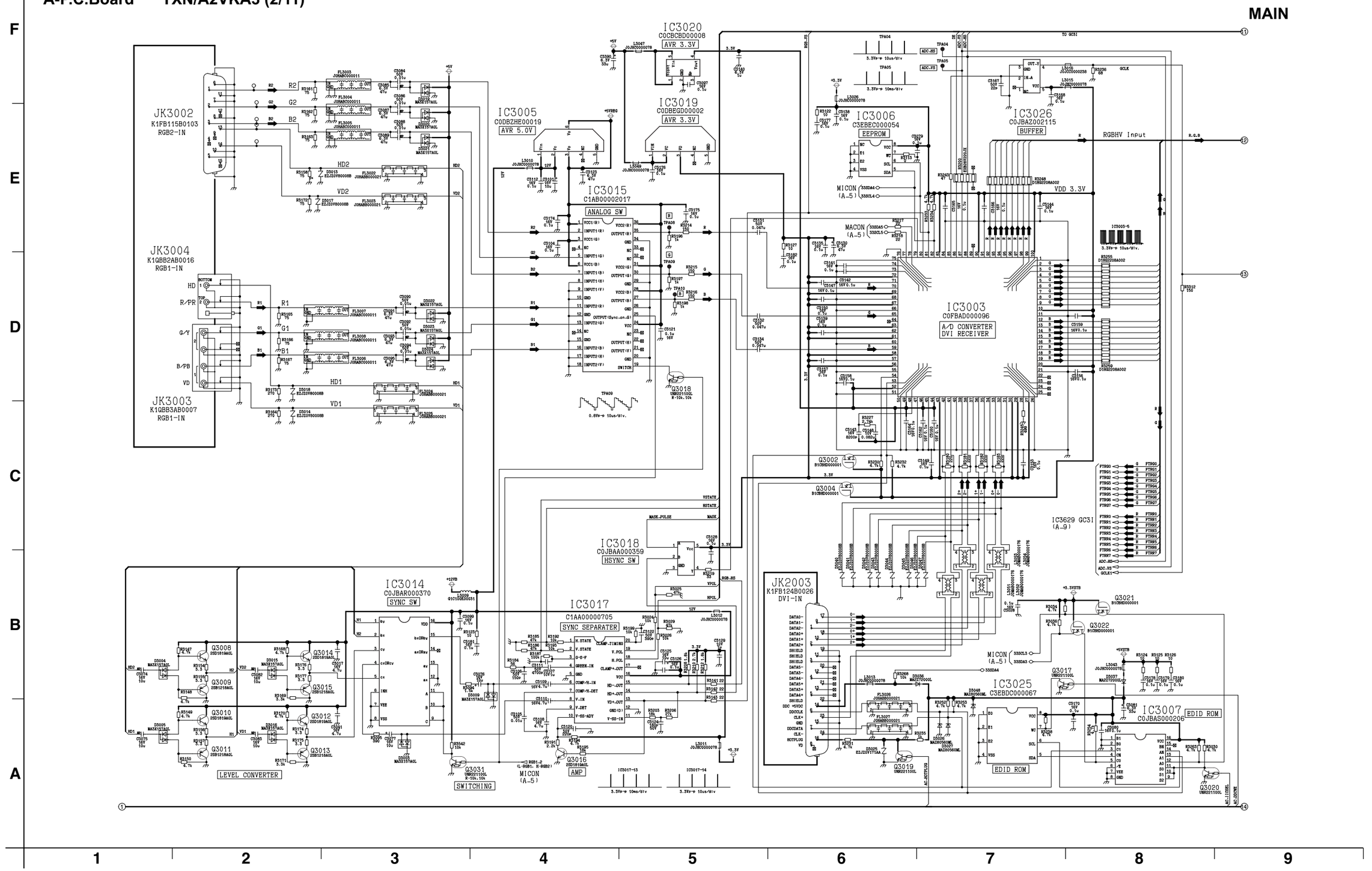
15.1. A-P.C.Board (1/11)

A-P.C.Board TXN/A2VKA3 (1/11)

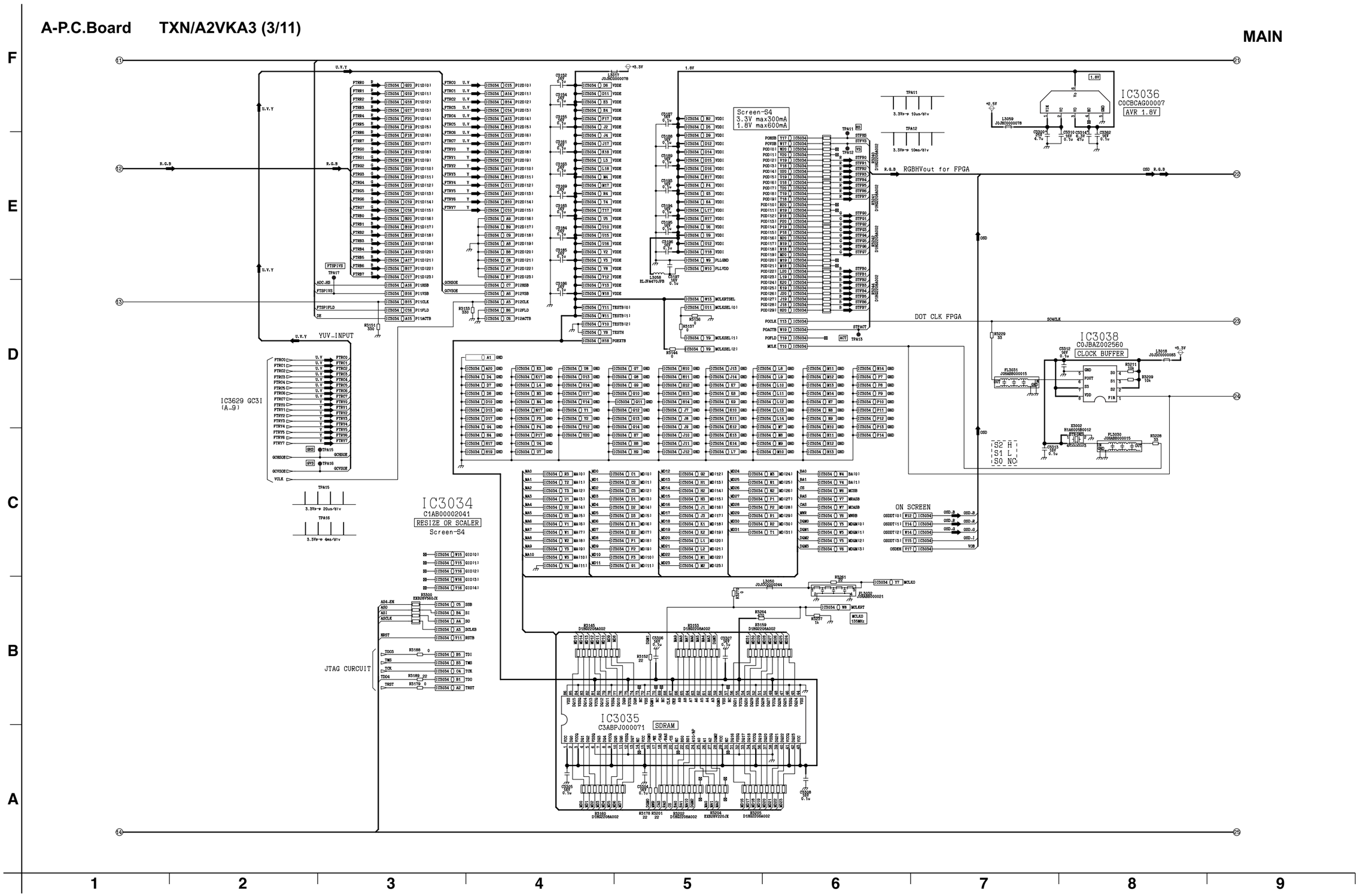


15.2. A-P.C.Board (2/11)

A-P.C.Board TXN/A2VKA3 (2/11)

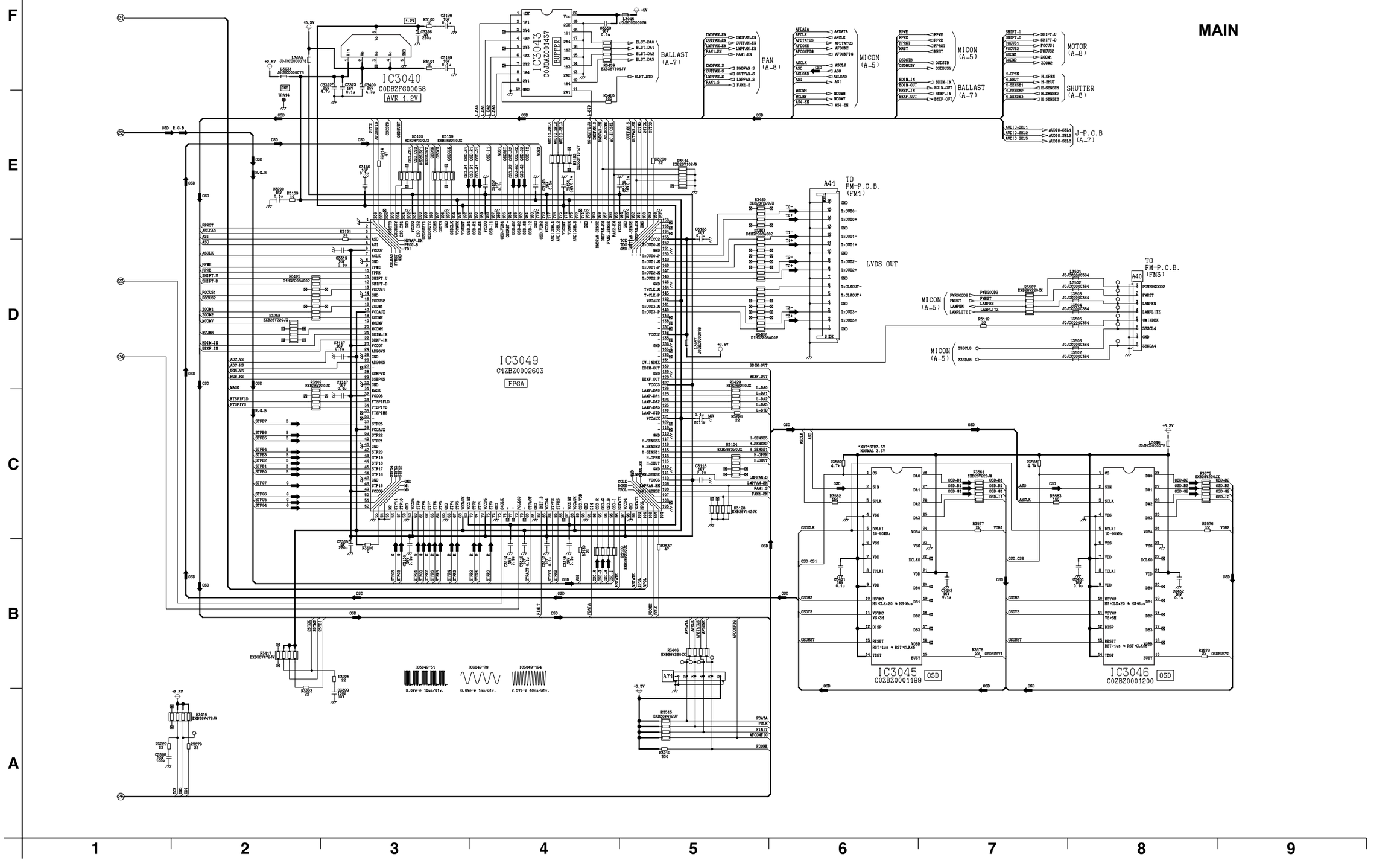


15.3. A-P.C.Board (3/11)



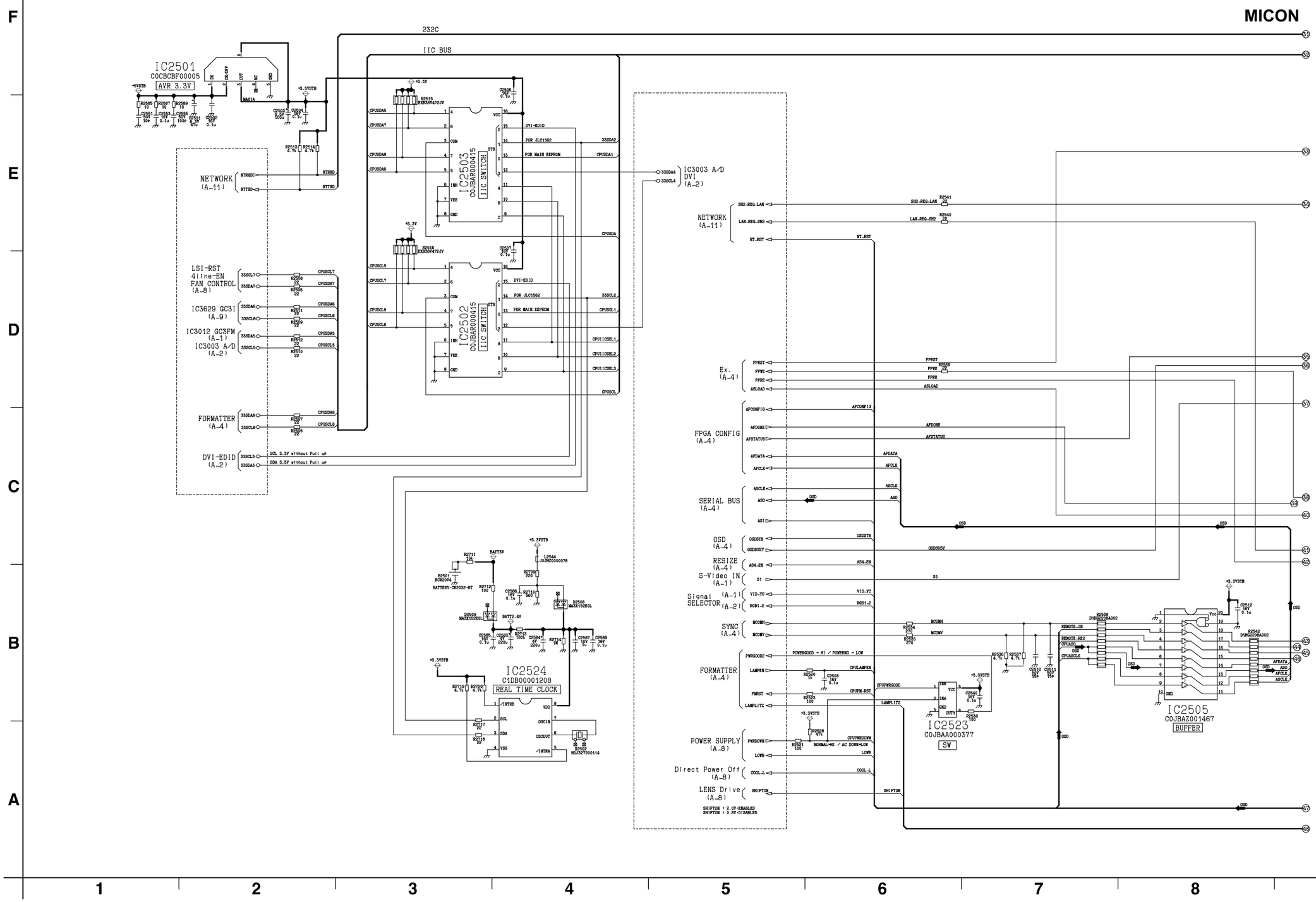
15.4. A-P.C.Board (4/11)

A-P.C.Board TXN/A2VKA3 (4/11)



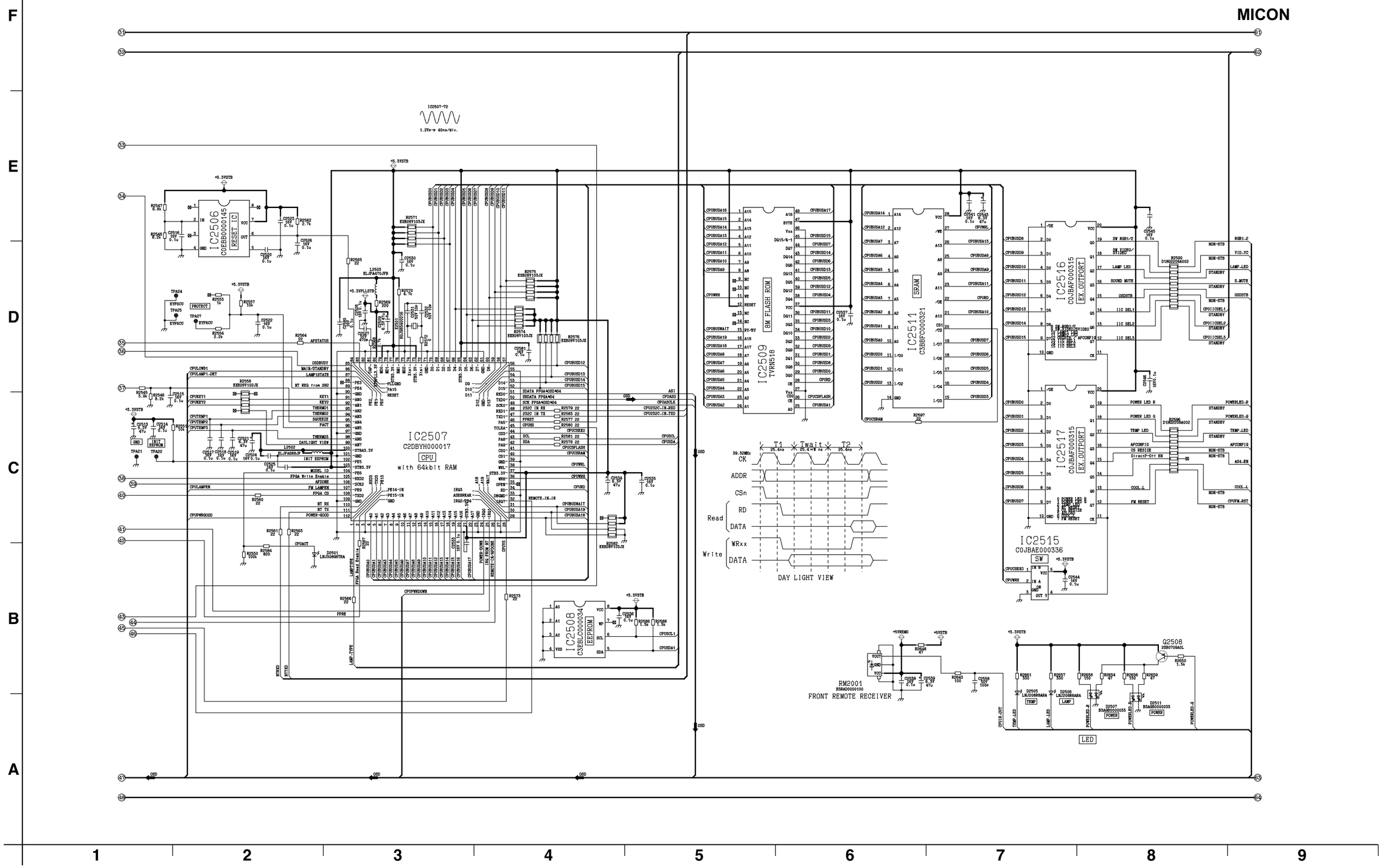
15.5. A-P.C.Board (5/11)

A-P.C.Board TXN/A2VKA3 (5/11)



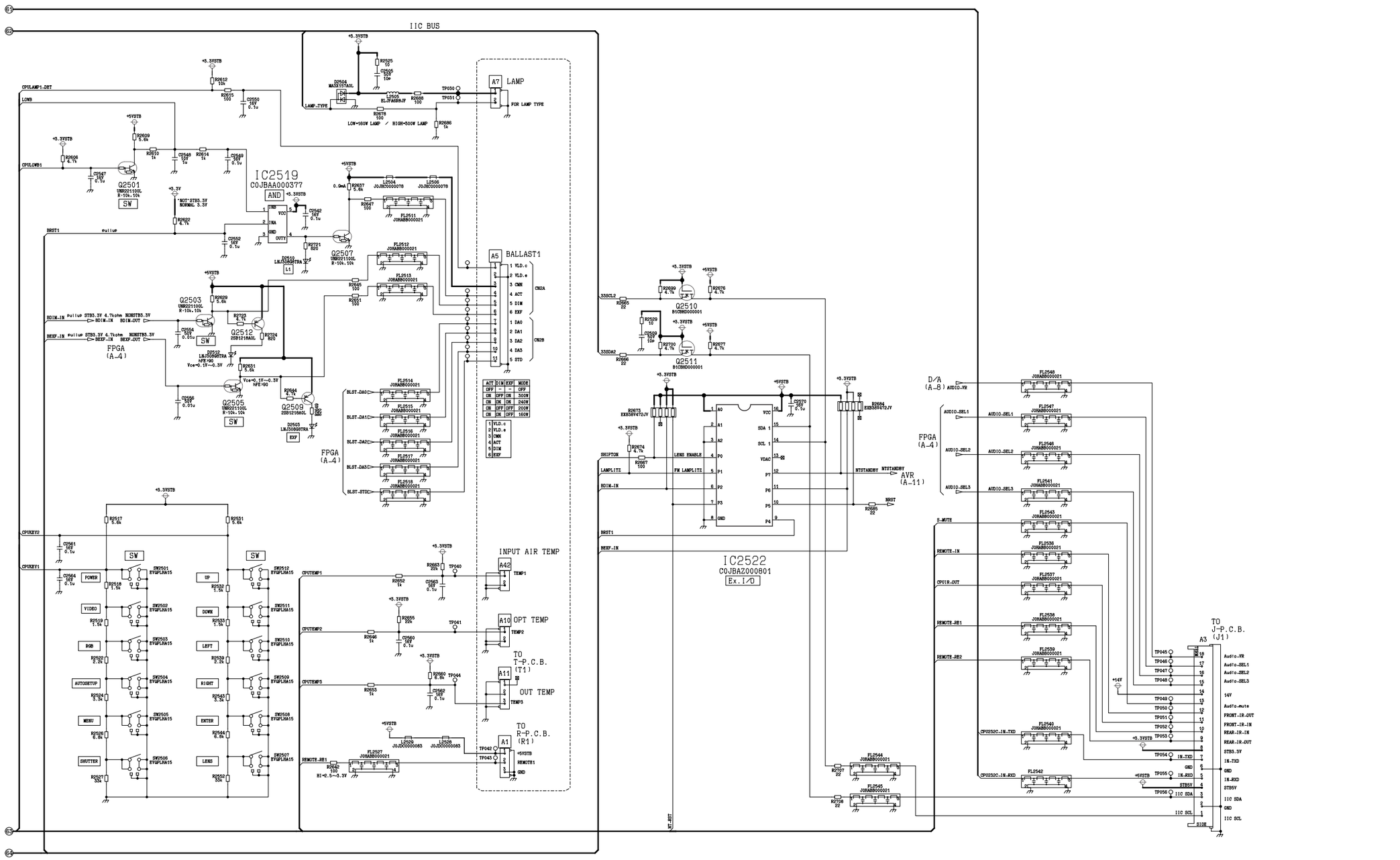
15.6. A-P.C.Board (6/11)

A-P.C.Board TXN/A2VKA3 (6/11)



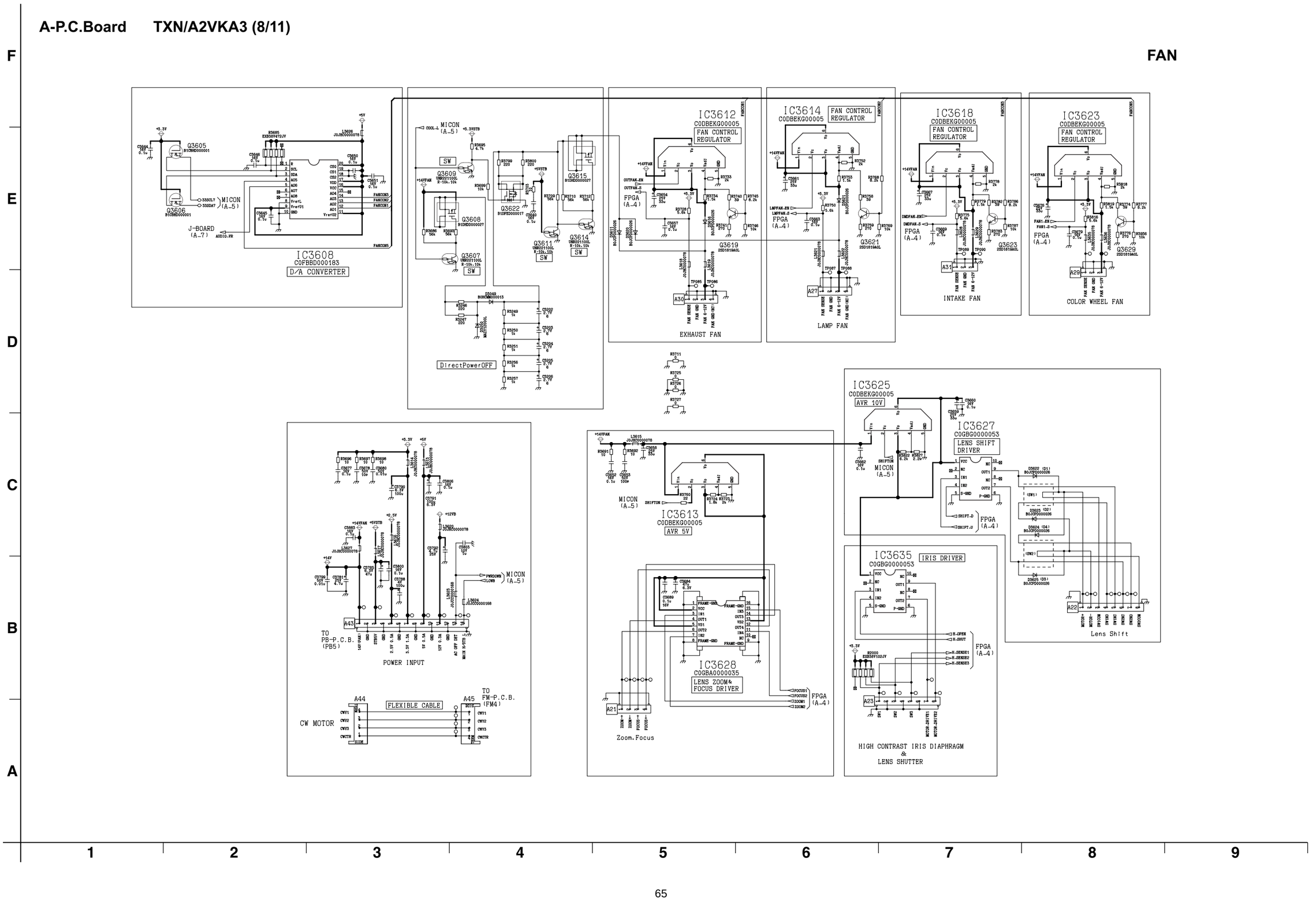
15.7. A-P.C.Board (7/11)

A-P.C.Board TXN/A2VKA3 (7/11)



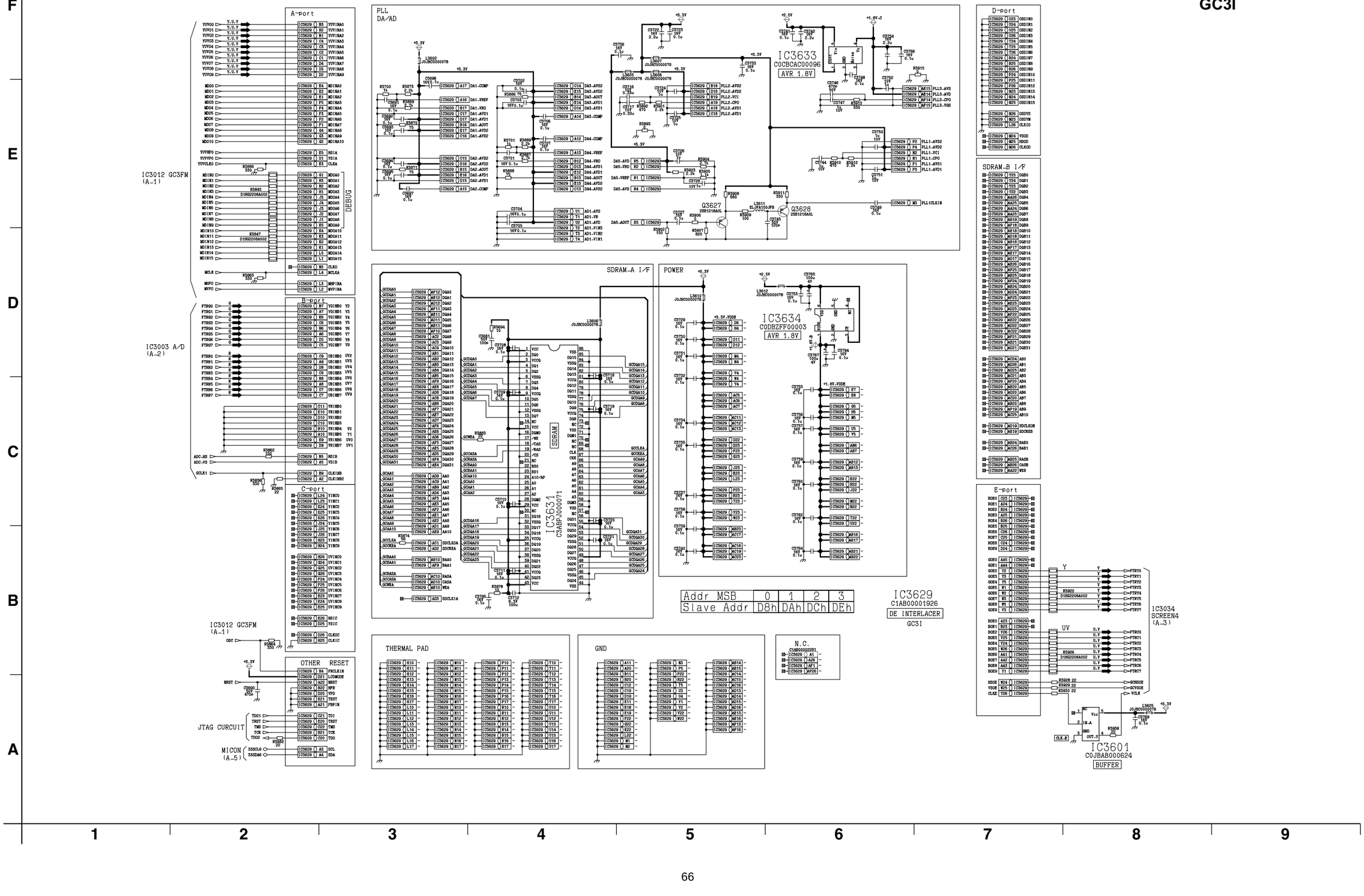
15.8. A-P.C.Board (8/11)

A-P.C.Board TXN/A2VKA3 (8/11)



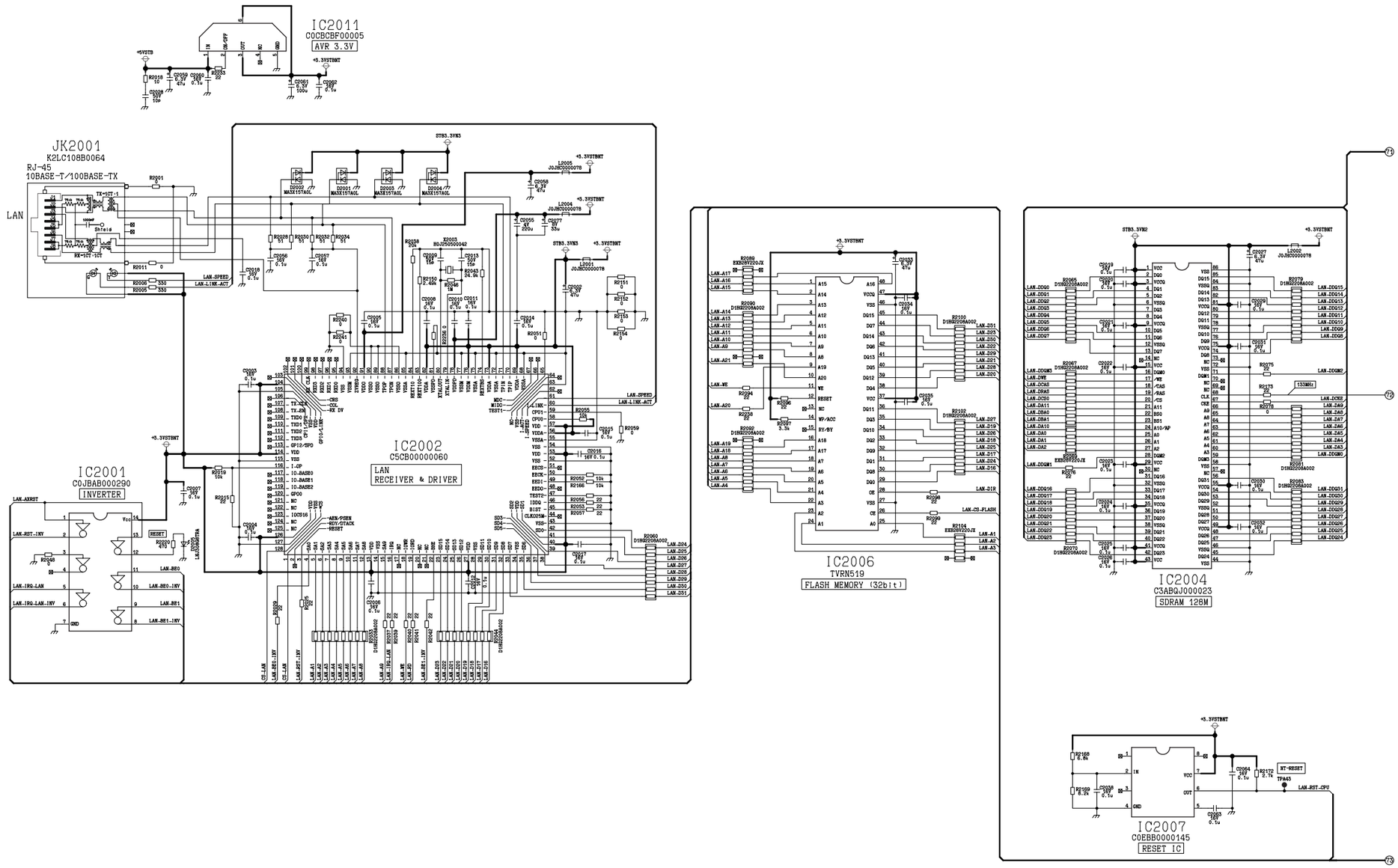
15.9. A-P.C.Board (9/11)

A-P.C.Board TXN/A2VKA3 (9/11)



15.10. A-P.C.Board (10/11)

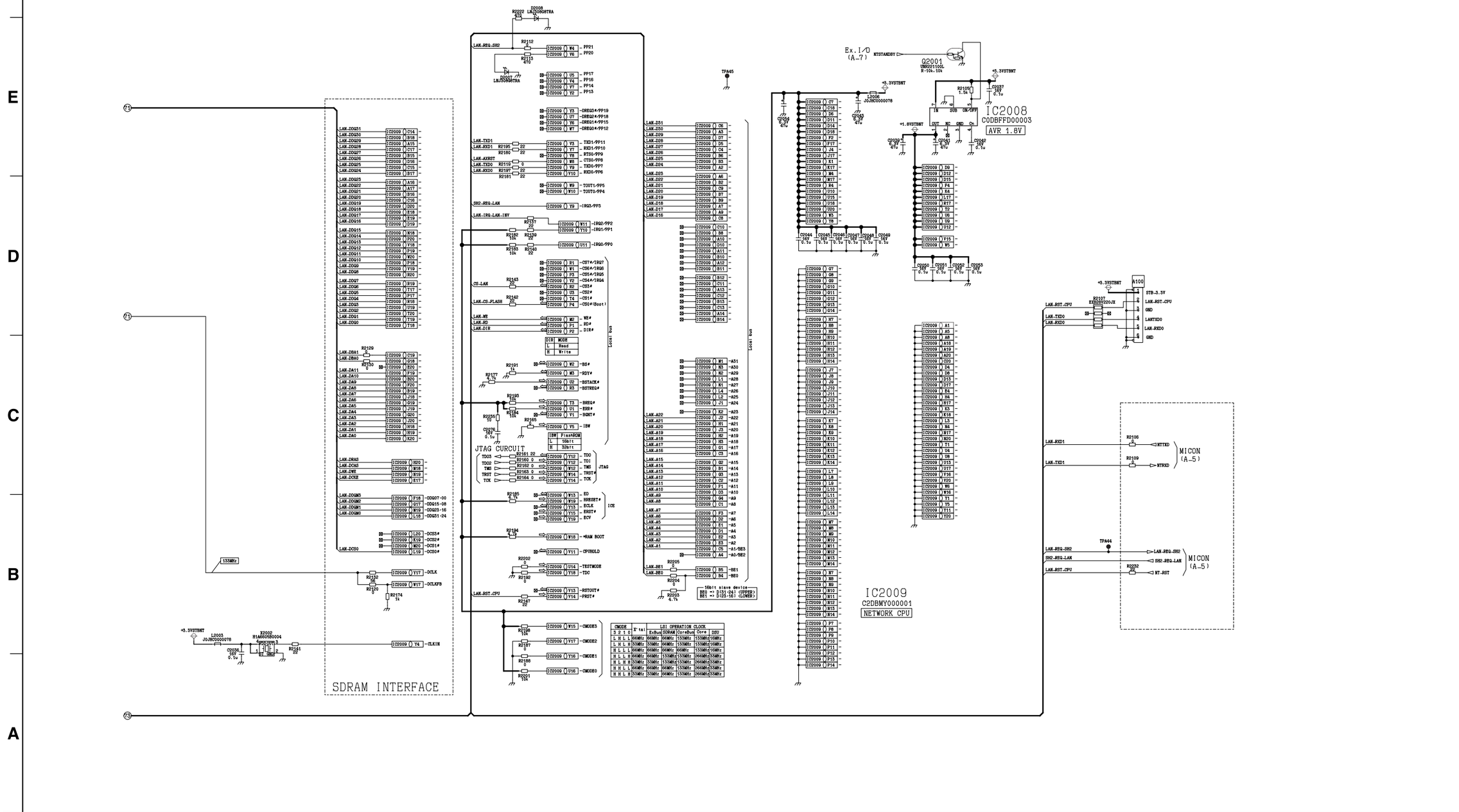
A-P.C.Board TXN/A2VKA3 (10/11)



15.11. A-P.C.Board (11/11)

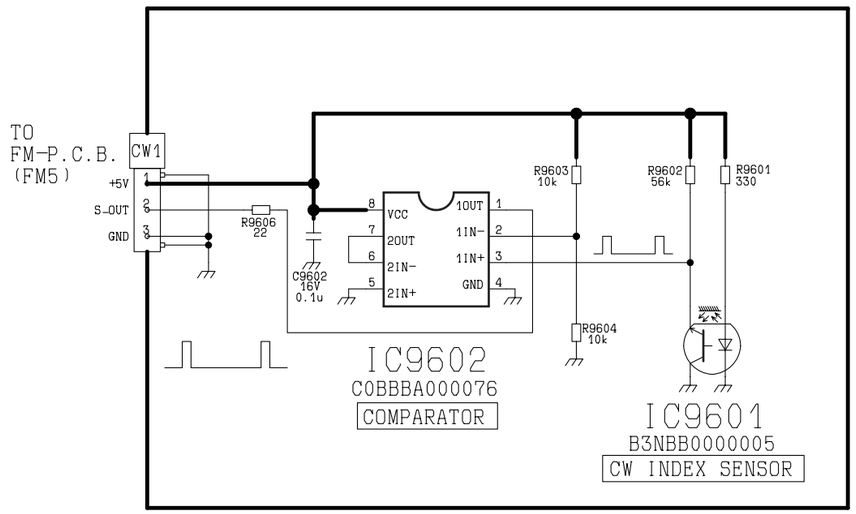
A-P.C.Board TXN/A2VKA3 (11/11)

NETWORK

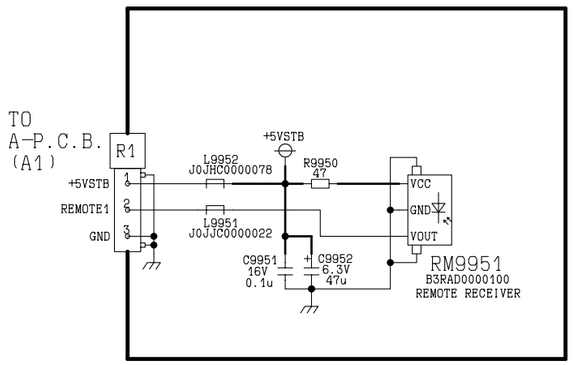


15.12. CW/R/T-P.C.Board

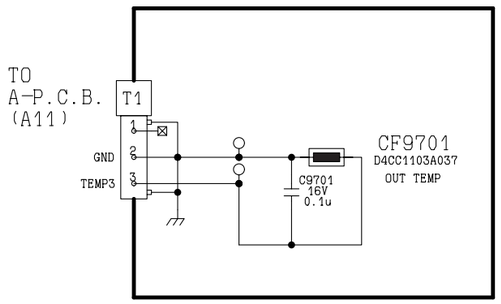
CW-P.C.Board TXNCW1VKA3



R-P.C.Board TXN/R1VKA3

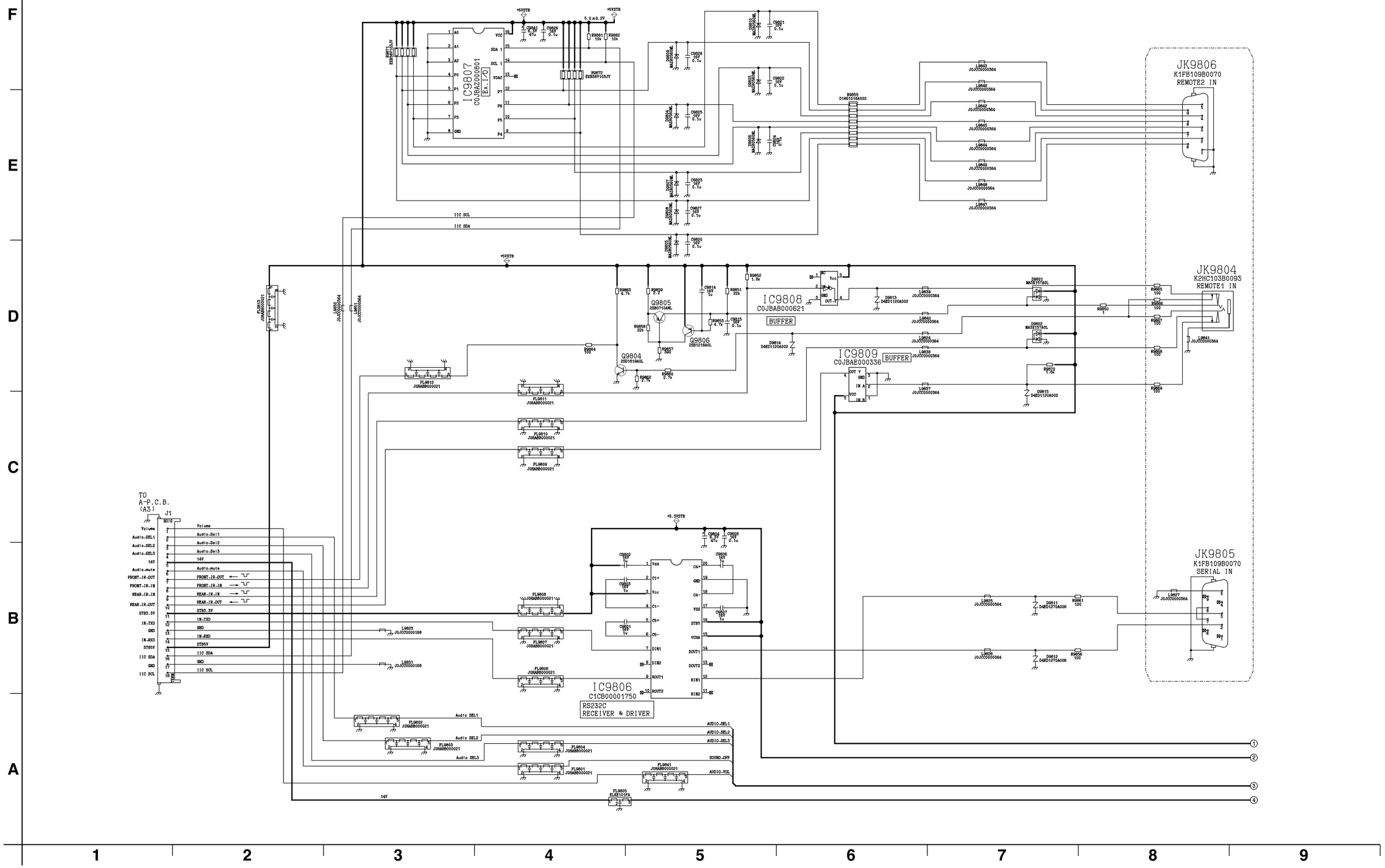


T-P.C.Board TXN/T1VKA3



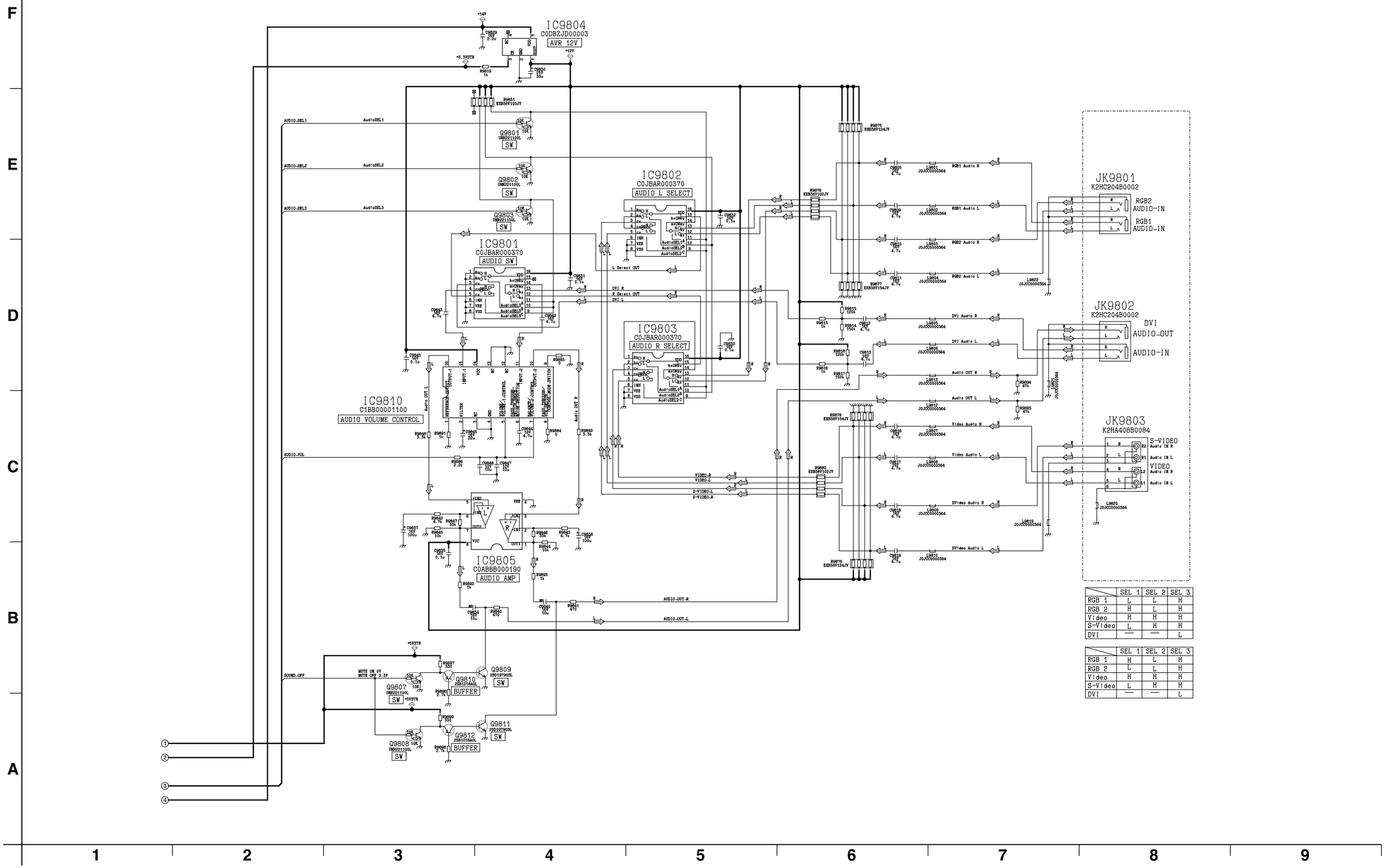
15.13. J-P.C.Board (1/2)

J-P.C.Board TXN/J1VKA3 (1/2)



15.14. J-P.C.Board (2/2)

J-P.C.Board TXN/J1VKA3 (2/2)



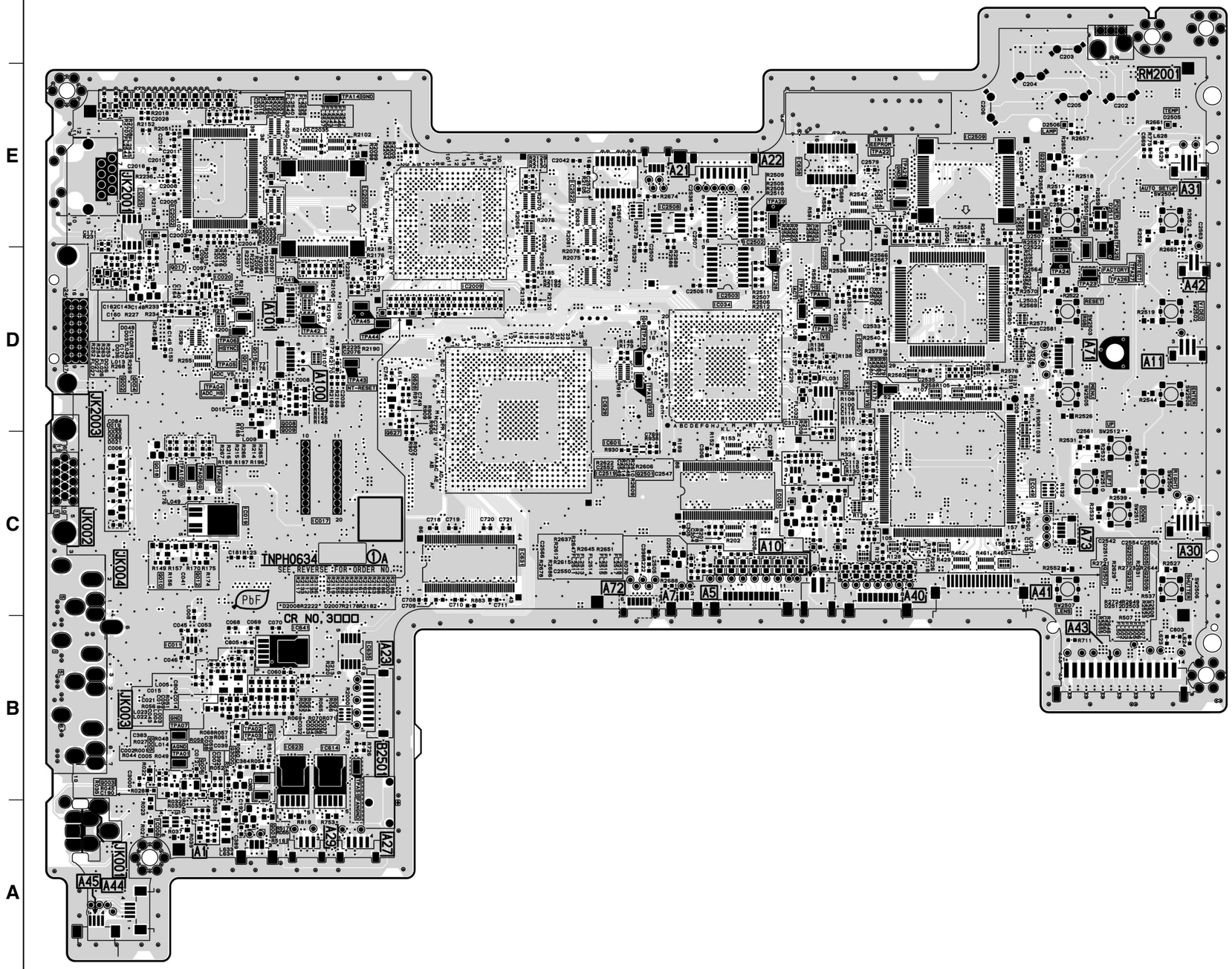
	SEL 1	SEL 2	SEL 3
RGB 1	L	L	H
RGB 2	H	L	H
Video	H	H	H
S-Video	L	H	H
DVI	—	—	L

	SEL 1	SEL 2	SEL 3
RGB 1	H	L	H
RGB 2	L	L	H
Video	H	H	H
S-Video	L	H	H
DVI	—	—	L

16 Circuit Boards

16.1. A-P.C.Board (Foil Side)

A-P.C.Board TXN/A2VKA3
(Foil side)

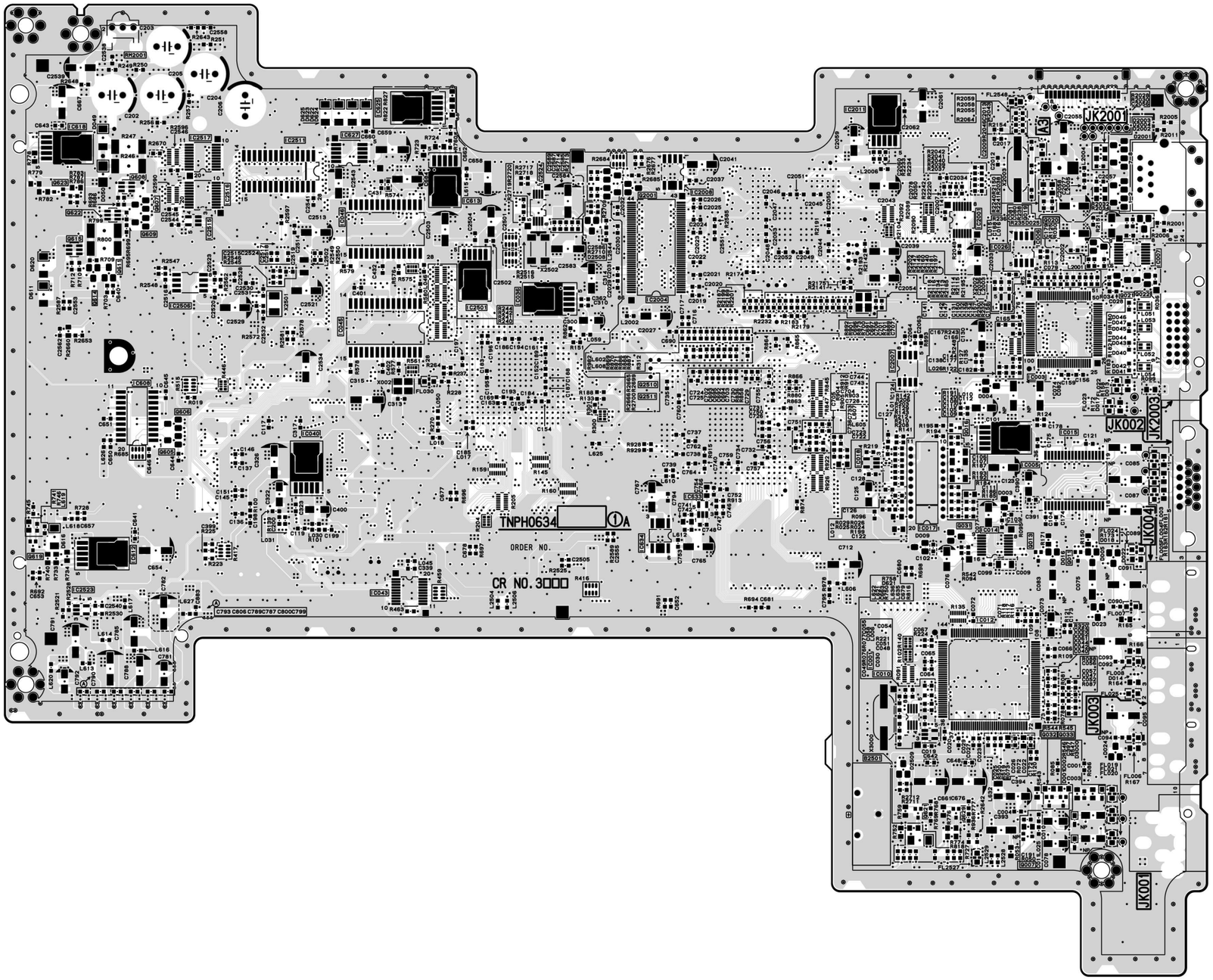


A-P.C.Board (Foil Side)			
IC			
IC2002	E-1	IC3020	D-2
IC2006	E-2	IC3025	E-1
IC2009	D-3	IC3034	D-4
IC2502	E-4	IC3035	C-4
IC2503	D-4	IC3038	D-5
IC2505	D-5	IC3049	C-6
IC2507	D-5	IC3601	C-4
IC2508	E-4	IC3614	B-2
IC2509	E-6	IC3623	B-2
IC2519	C-4	IC3628	E-5
IC2522	E-4	IC3629	D-3
IC3008	A-1	IC3631	C-3
IC3011	B-1	IC3635	B-2
IC3019	C-2	IC3641	B-2
TRANSISTOR			
Q2501	C-4	Q3005	B-1
Q2503	C-6	Q3006	B-1
Q2505	C-7	Q3008	D-2
Q2507	C-6	Q3009	D-2
Q2508	E-6	Q3010	C-1
Q2509	C-7	Q3012	C-1
Q2512	C-6	Q3014	D-2
Q3000	B-2	Q3015	D-2
Q3001	A-2	Q3017	D-1
Q3002	D-1	Q3018	D-1
Q3003	B-1	Q3627	C-3
Q3004	D-1	Q3628	D-3
TP			
TPA1	B-1	TPA17	D-5
TPA2	B-2	TPA21	E-5
TPA3	B-2	TPA22	E-5
TPA4	D-2	TPA23	D-6
TPA5	D-2	TPA24	D-6
TPA6	D-2	TPA25	D-6
TPA7	B-1	TPA26	D-6
TPA8	C-1	TPA27	D-6
TPA9	C-1	TPA28	D-5
TPA10	C-1	TPA29	E-5
TPA11	D-5	TPA41	D-2
TPA12	D-5	TPA42	D-2
TPA13	D-5	TPA43	D-2
TPA14	E-2	TPA44	D-2
TPA15	D-4	TPA45	D-2
TPA16	D-4	TPA51	B-2

ADDRESS INFORMATION

16.2. A-P.C.Board (Component Side)

A-P.C.Board TXN/A2VKA3
(Component side)

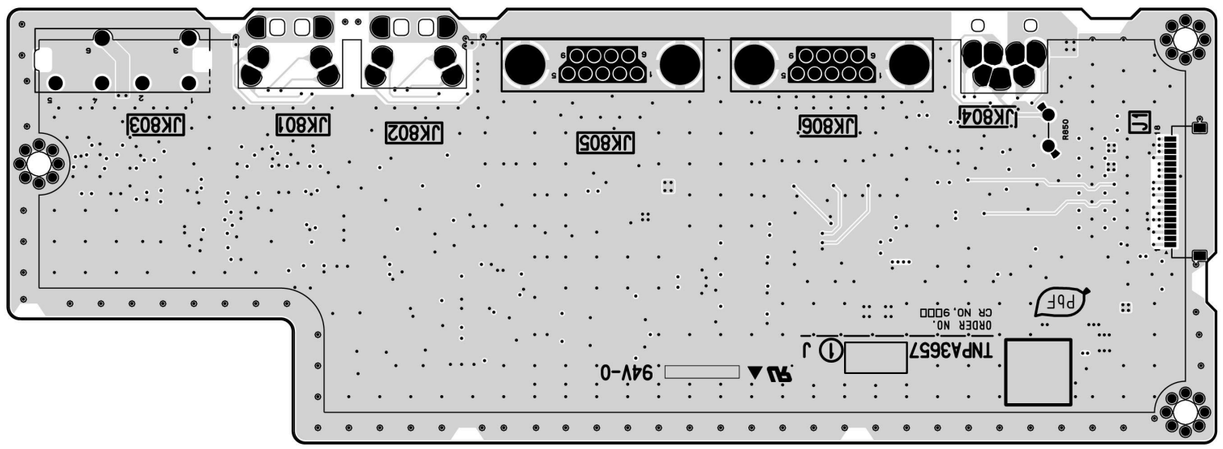


A-P.C.Board (Component Side)			
IC			
IC2001	E-6	IC3012	B-6
IC2004	D-4	IC3014	C-6
IC2007	D-5	IC3015	C-6
IC2008	E-4	IC3017	C-6
IC2011	E-5	IC3018	C-5
IC2501	D-3	IC3026	D-6
IC2506	D-2	IC3036	D-3
IC2511	E-2	IC3040	C-2
IC2515	E-2	IC3043	C-3
IC2516	E-2	IC3045	E-3
IC2517	E-2	IC3046	E-3
IC2523	C-1	IC3608	D-1
IC2524	E-3	IC3612	C-1
IC3001	B-5	IC3613	E-3
IC3003	D-6	IC3618	E-1
IC3005	C-6	IC3625	E-3
IC3006	E-6	IC3627	E-2
IC3007	D-7	IC3633	C-4
IC3010	B-5	IC3634	C-4
TRANSISTOR			
Q2001	E-4	Q3605	C-2
Q2510	D-4	Q3606	D-2
Q2511	D-4	Q3607	E-1
Q3007	A-6	Q3608	E-1
Q3011	C-6	Q3609	E-1
Q3013	C-6	Q3611	D-1
Q3016	D-6	Q3614	D-1
Q3019	E-6	Q3615	E-1
Q3020	E-6	Q3019	E-1
Q3021	D-7	Q3621	A-6
Q3022	D-7	Q3622	E-1
Q3031	C-6	Q3623	E-1
Q3032	B-6	Q3629	A-6
Q3033	B-6		

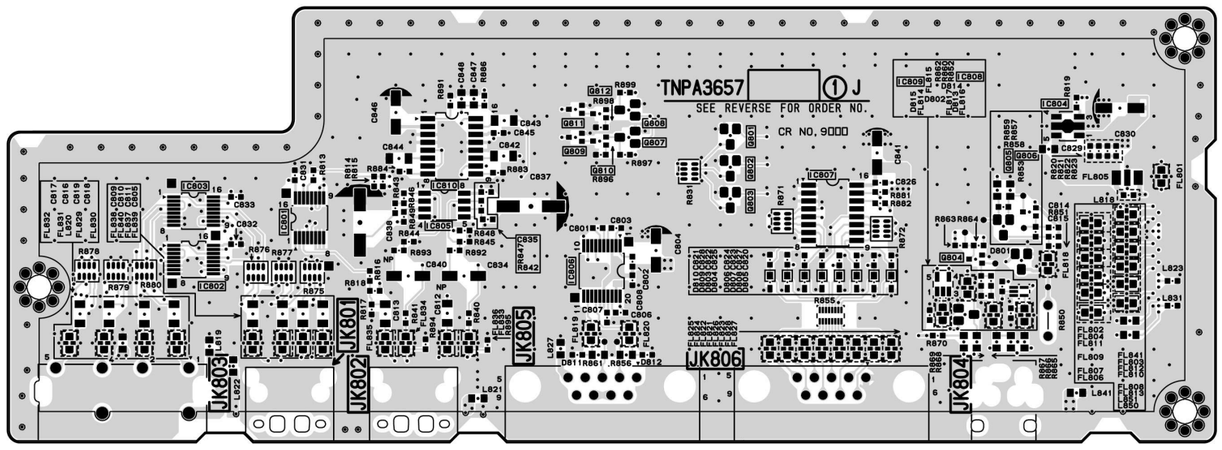
ADDRESS INFORMATION

16.3. J-P.C.Board

J-P.C.Board TXN/J1VKA3
(Foil side)



J-P.C.Board TXN/J1VKA3
(Component side)

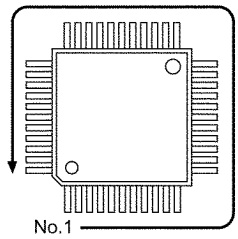


J-P.C.Board (Component Side)	
IC	
IC9801	A-2
IC9802	A-1
IC9803	B-1
IC9804	B-5
IC9805	B-2
IC9806	A-3
IC9807	B-4
IC9808	B-4
IC9809	B-4
IC9810	B-2
TRANSISTOR	
Q9801	B-4
Q9802	B-4
Q9803	B-4
Q9804	A-4
Q9805	B-5
Q9806	B-5
Q9807	B-3
Q9808	B-3
Q9809	B-3
Q9810	B-3
Q9811	B-3
Q9812	B-3

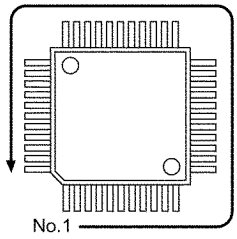
ADDRESS INFORMATION

17 Terminal guide of ICs and transistors

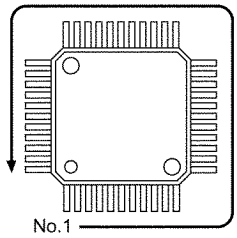
Terminal guide of ICs and transistors



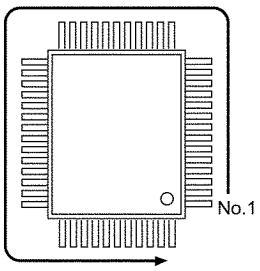
C1ZBZ0002603 208 Pin



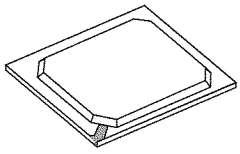
C2DBYH000017 112 Pin



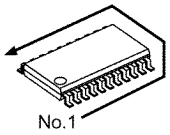
C1AB00001868 144 Pin



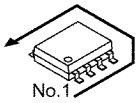
C5CB00000060 128 Pin



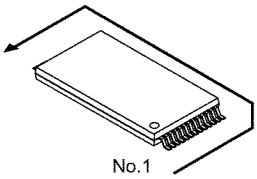
C2DBMY000001
C1AB00001926
C1AB00002041



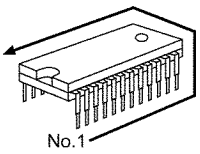
C3ABPJ000071	86 Pin
C0JBAZ000801	16Pin
C0JBAZ001467	20Pin
C0JBAR000370	16Pin
C1AB00002017	36Pin
C0JBAB000290	14Pin
C3ABQJ000023	86 Pin
C0ZBZ0000924	28 Pin
C0ZBZ0000925	28 Pin
C0JBAZ001437	20 Pin
C0BBFC000321	28 Pin
C0JBAF000315	20 Pin
C0FBBD000183	20 Pin
C1CB00001750	20 Pin



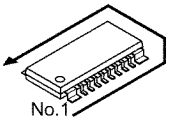
C1AB00001466	6 Pin
C0GBG0000053	10 Pin
C3EBLC000034	8 Pin
C0JBAZ002560	8 Pin
C0JBAB000633	8 Pin
C0EBB0000145	8 Pin
C1DB00001208	8 Pin



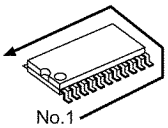
TVRN298 48 Pin



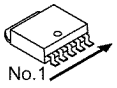
C1AA00000705 20 Pin
(M52036SP)



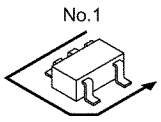
C0GBA0000035 16 Pin



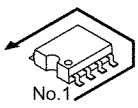
C0JBAR000415 16 Pin



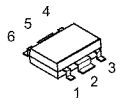
C0DBEKG00005	5 Pin
C0DBCFG00011	5 Pin
C0DBCGE00004	5 Pin
C0DBZHE00019	5 Pin
C0CBCAG00007	5 Pin
C0CBCBF00005	5 Pin
C0DBZFG00058	5 Pin



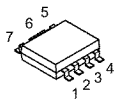
C0CBCAD00012	5 Pin
C0JBAA000359	5 Pin
C0JBAE000336	5 Pin
C0JBAA000377	5 Pin



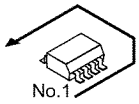
C0ABBB000190 8 Pin



C0DBZFF00003 6 Pin



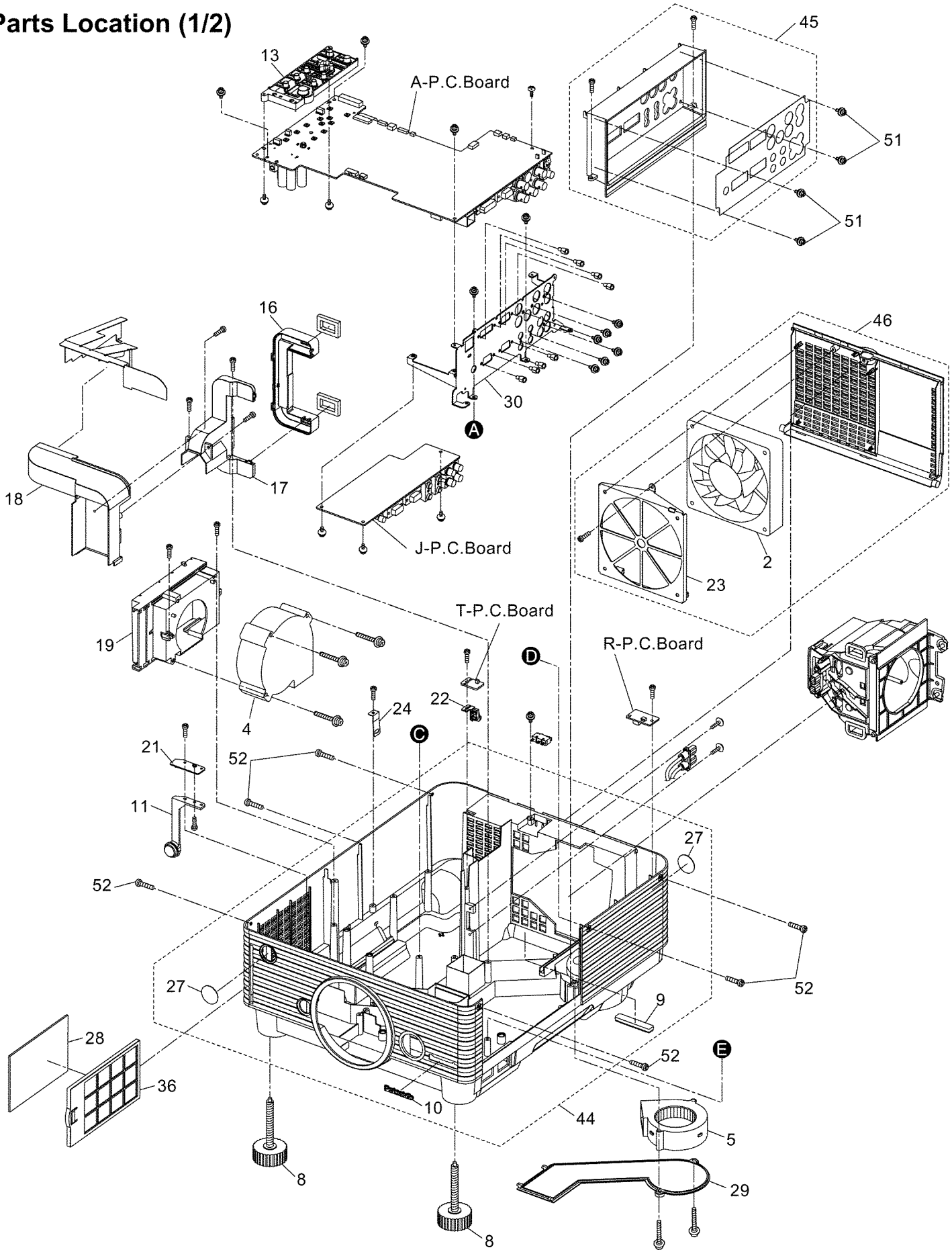
C0DBFFD00003 7 Pin



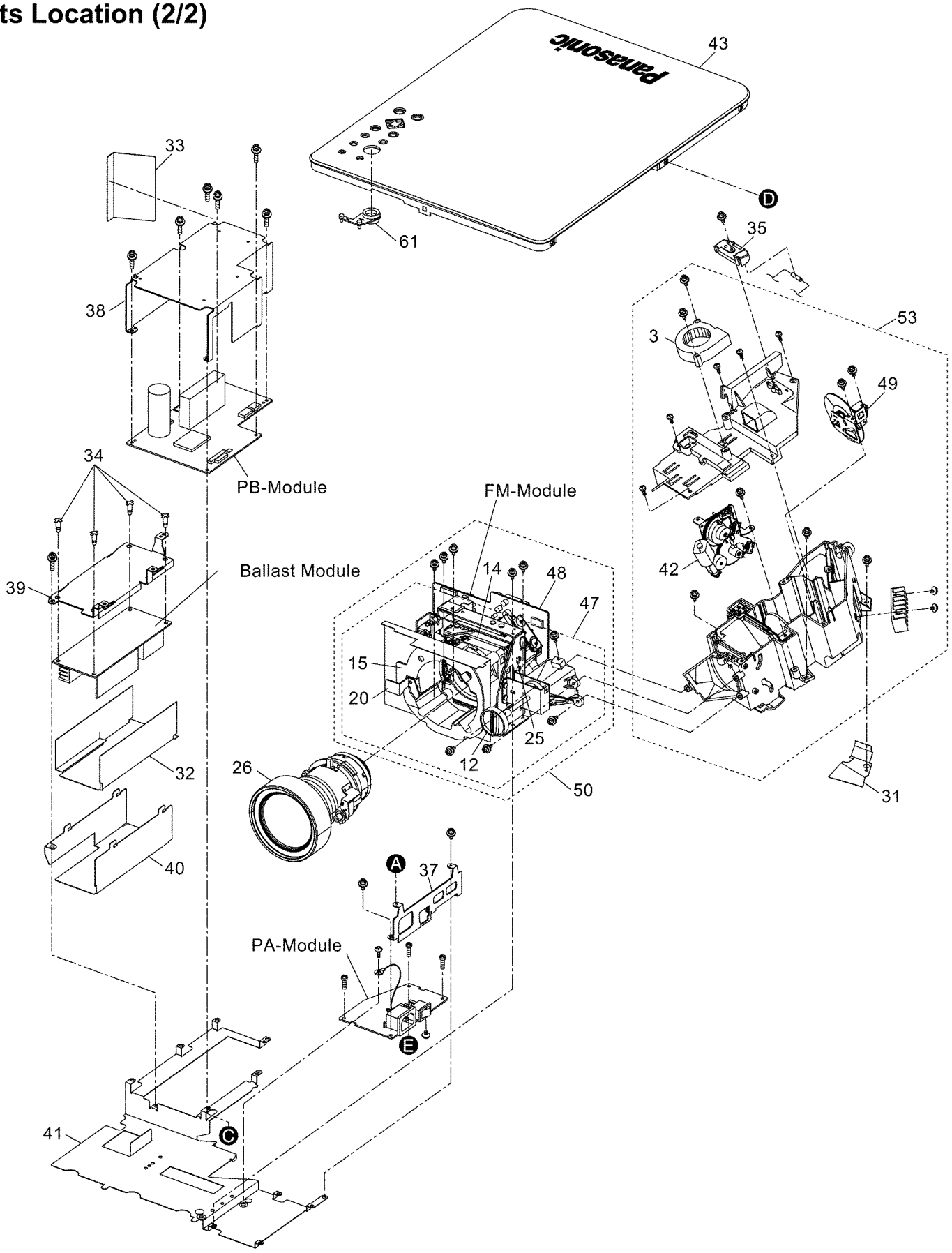
C3EBDC000067 8 Pin

18 Exploded Views

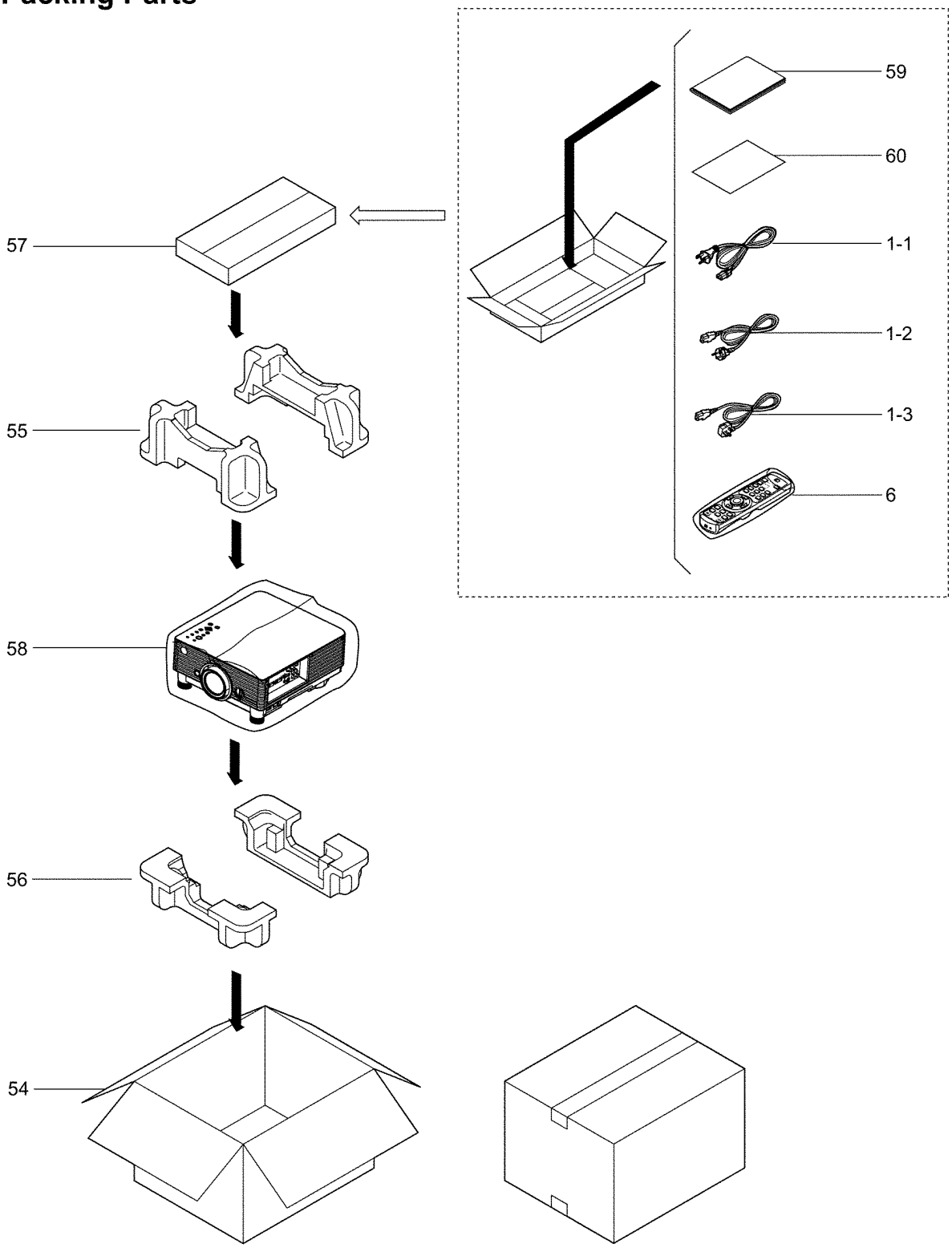
Parts Location (1/2)



Parts Location (2/2)



Packing Parts



19 Replacement Parts List

Important Safety Notice

Components identified by the International symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only the manufacturer's specified parts.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : ± 1 %
F : Fuse	G : ± 2 %
M : Metal Oxide	J : ± 5 %
Metal Film	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

2. Capacitor

Example:

ECKF1H103ZF C 0.01PF, Z, 50V

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : ±0.25 pF
E : Electrolytic	D : ±0.5 pF
P : Polyester	F : ± 1 pF
PP : Polypropylene	J : ± 5 %
S : Polystyrol	K : ±10 %
T : Tantalum	L : ±15 %
	M : ±20 %
	P : +100 %, -0 %
	Z : +80 %, -20 %

Notes:

Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Name & Description	Remarks
		[MECHANICAL PARTS]	
	D4CDH4930004	THERMISTER(OPTICAL)	
	D4CDH5030003	TEMP SENSOR	
	K0AAKA000014	SWITCH	⚠
	K2AH3B000016	AC INLET	⚠
1-1	K2CG3FZ00008	POWER CORD	⚠ PT-D3500U
1-2	K2CM3FZ00003	POWER CORD (EUROPE)	⚠ PT-D3500E
1-3	K2CT3FZ00003	POWER CORD (U.K)	⚠ PT-D3500E
2	L6FAPEHH0008	VENTILATION FAN	⚠
3	L6FCJC9H0009	CW FAN	⚠
4	L6FCLECH0005	FAN (LAMP)	⚠
5	L6FCNGEH0005	FAN (DMD)	⚠
6	N2QAEA000023	REMOTE CONTROLLER	
8	TBLB3081	ADJUSTER	
9	TBLG3042	RUBBER LEG (REAR)	
10	TBMA139	PANASONIC BADGE	
	TBMG040	MODEL NAME PLATE	⚠ PT-D3500U
	TBMG041-1	MODEL NAME PLATE	⚠ PT-D3500E
	TBMG042	MODEL NO. LABEL	PT-D3500U
	TBMG043	MODEL NO. LABEL	PT-D3500E
11	TBXA44501	LENS RELEASE BUTTON	
12	TBXA44601	H. SHIFT CONTROL BUTTON	
13	TBXA47101	CONTROL BUTTON	
14	TEEC0033-1	LENS EXCHANGE MECHA UNIT	
15	TEEC5168-1	LENS GUIDE	
16	TEEC5204	DUCT 1	
17	TEEC5205	DUCT 2	
18	TEEC5206	DUCT (DMD)	
19	TEEC5207	FAN DUCT	
20	TEKX030	LENS EXCHANGE LEVER	
21	TENC5321	BUTTON SUPPORT PLATE	
22	TENC5322	SW SUPPORT PLATE	
23	TENC5323	FAN SUPPORT PLATE	
24	TENC5329	PLATE	
	TENC5334	GUIDE PLATE	
25	TGAX034-1	ELECTRIC SHIFT MOUNT	⚠
	THEC084N	SCREW (D-SUB)	
26	TKGF0127	IENS	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
27	TKKC5194	REMOTE CONTROL RECEIVER	
61	TKKC5220	LED PLATE	
	TKKL5244-1	LENS CAP	
28	TKNE053	FILTER	
29	TKPA96501	DUCT COVER	
30	TKZF5041	TERMINAL PLATE	
	TMKG353	FIRE SHEET	
	TMKG481	PROTECTION DUST SHEET (FAN)	
	TMKG481	PROTECTION DUST SHEET (FAN)	
	TMKG482	PROTECTION DUST SHEET (DUCT)	
	TMKG598	SHEET 2	
	TMKG599	SHEET 3	
	TMKG600	FAN SEAL	
	TMKX908	SHIELD SHEET	
	TMKX910	SHEET (DUCT)	
31	TMKX912	LAMP FAN DUCT COVER	
32	TMKX914	INSULATION SHEET	
33	TMKX936	SHIELD CASE BACKCOVER	
	TMKX952	TAPE	
	TMKX953	INSULATION SHEET (BALLAST)	
	TMKX958	DUCT SHEET	
34	TMME240	P.C.B SPACER	
	TMME245	SPACER	
35	TMXC017	TEMP FUSE METAL	
36	TMZX5046	FILTER COVER	
54	TPCB84302	CARTON	PT-D3500U
	TPCB84303	CARTON	PT-D3500E
55	TPDA1186	CUSHION 1	
56	TPDA1187	CUSHION 2	
57	TPDF1311	ACCESSARY PACKING CASE	
58	TPEH187-1	SET COVER	
	TQB817002-1	SAFETY SHEET	PT-D3500U
60	TQBH7017	SHEET (PASSWORD)	
59	TQBJ0178	INSTRUCTION BOOK	⚠ PT-D3500U
	TQBJ0179	INSTRUCTION BOOK	⚠ PT-D3500E
	TQD1712010	SHEET	
	TQDJ18027	GUARANTEE CARD (USA)	PT-D3500U
	TQDJ19019	WEEE SHEET	PT-D3500E

Ref. No.	Part No.	Part Name & Description	Remarks
	TSK1018	FERRITE CORE	⚠ J0KG00000013
	TSXL474	FLEX CABLE (A3-J1)	
	TSXL475	FLEX CABLE(A41-FM1)	
	TSXL477	FLEX CABLE(A-CW)	
37	TUCC6061	EARTH METAL(K-PCB)	
38	TUCC6066	POWER SHIELD PLATE	
39	TUCC6072	SHIELD CASE 1 (BALLAST)	
40	TUCC6073	SHIELD CASE 2 (BALLAST)	
41	TUCX5206	BASE PLATE	
	TXAUX01VKA3	POWER UNIT (ASSY)	
	TXAUX02VKA3	BALLAST UNIT	
	TXAUX03VKA3	CIRCUIT BOARD PA	
42	TXFEK01VKA3	MECHA SHUTTER MOTOR UNIT	
43	TXFKF01VKA3	TOP COVER	⚠
44	TXFKF******	BOTTOM COVER	⚠
45	TXFPA01VKA3	TERMINAL COVER (ASSY)	⚠
46	TXFPA02VKA3	LAMP COVER (ASSY)	⚠
	TXFSE01VKA3	LEAD WIRE (WITH MOTOR)	
	TXFSE02VKA3	FAIL SAFE SWITCH	
	TXFSE03VKA3	LAMP CHANGEOVER SW LEAD	
	TXJ/A5VKA3	COUPLER (A5-BALLAST)	
	TXJ/E1VKA3	INLET EARTH LEAD WIRE	
	TXJ/E5VJW2A	LEAD WIRE	
	TXJ/R1VKA3	COUPLER (A1-R1)	
	TXJ/T1VKA3	COUPLER	
	TXJA40VKA3	COUPLER (A40-FM3)	
	TXJFM5VKA3	COUPLER(FM5-CW1)	⚠
	TXJFM7VKA3	COUPLER	
	TXJPA2VKA3	COUPLER (PA2-TEMP FUSE)	⚠
	TXJPB1VKA3	COUPLER (PB1-PA1)	
	TXJPB3VKA3	COUPLER (PB3-CN1)	
	TXJPB5VKA3	COUPLER (A43-PB5)	
	TXJPB6VKA3	COUPLER (PB6-FM2)	
53	TXZEC01VKA3	ANALYSIS BLOCK	
47	TXZEC02VKA3	LENS MOUNT	
48	TXZEN01VKA3	DMD	
49	TXZKG04VKA3	COLOR WHEEL	⚠
50	TXZKG06VKA3	DMD BLOCK (ASSY)	
	XQN2+C2FJK	SCREW (MOTOR)	
	XQN2+C3FJK	SCREW (CW)	
	XSB2+8FJ	SCREW	
	XSB3+6FZ	SCREW	
51	XSB3+8FN	SCREW	
	XSB4+10FC	SCREW	
	XSN3+8FJ	SCREW	
52	XTBT969FJK	SCREW	
	XTN3+25GFJ	SCREW	
	XTN3+4FFJ	SCREW	
	XTN4+45BFJ	SCREW	
	XTV3+10GFJ	SCREW	
	XTV3+10JFJ	SCREW	
	XTW3+8PFJ	SCREW	
	XUC3FJ	WASHER	
	XYC3+JJ12FJ	SCREW	
	XYN2+J6FJ	SCREW	
	XYN3+F18FJ	SCREW	
	XYN3+F6FJ	SCREW	
	XYN3+F8FJ	SCREW	
	XYN3+J35FJ	SCREW (DUCT COVERÅj	
	XYN3+J6FJ	SCREW	
	XYN4+E8FJ	SCREW	
[INTEGRATED CIRCUIT]			
IC2001	C0JBAB000290	I.C	
IC2002	C5CB00000060	I.C	
IC2004	C3ABQJ000023	I.C	
IC2006	TVRN519	I.C	

Ref. No.	Part No.	Part Name & Description	Remarks
IC2007	C0EBB0000145	I.C	
IC2008	C0DBFFD00003	I.C	
IC2009	C2DBMY000001	I.C	
IC2011	C0CBCBF00005	I.C	
IC2501	C0CBCBF00005	I.C	
IC2502	C0JBAR000415	I.C	
IC2503	C0JBAR000415	I.C	
IC2505	C0JBAZ001467	I.C	
IC2506	C0EBB0000145	I.C	
IC2507	C2DBYH000017	I.C	
IC2508	C3EBLC000034	I.C	
IC2509	TVRN518	I.C	
IC2511	C3BBFC000321	I.C	
IC2515	C0JBAE000336	I.C	
IC2516	TC74LCX574TL	I.C	C0JBAF000315
IC2517	TC74LCX574TL	I.C	C0JBAF000315
IC2519	C0JBAA000377	I.C	
IC2522	C0JBAZ000801	I.C	
IC2523	C0JBAA000377	I.C	
IC2524	C1DB00001208	I.C	
IC3001	C0JBAB000633	I.C	
IC3003	C0FBAD000096	I.C	
IC3005	C0DBZHE00019	I.C	
IC3006	C3EBEC000054	I.C	
IC3007	C0JBAS000206	I.C	
IC3008	C1AB00001466	I.C	
IC3010	C0CBCAD00012	I.C	
IC3011	C0CBCAD00012	I.C	
IC3012	C1AB00001868	I.C	
IC3014	C0JBAR000370	I.C	
IC3015	C1AB00002017	I.C	
IC3017	C1AA00000705	I.C	
IC3018	C0JBAA000359	I.C	
IC3019	C0DBEGD00002	I.C	
IC3020	C0CBCBD00008	I.C	
IC3025	C3EBDC000067	I.C	
IC3026	C0JBAZ002115	I.C	
IC3034	C1AB00002041	I.C	
IC3035	C3ABPJ000071	I.C	
IC3036	C0CBCAG00007	I.C	
IC3038	C0JBAZ002560	I.C	
IC3040	C0DBZFG00058	I.C	
IC3043	C0JBAZ001437	I.C	
IC3045	C0ZBZ0001199	I.C	
IC3046	C0ZBZ0001200	I.C	
IC3049	C1ZBZ0002603	I.C	
IC3601	C0JBAB000624	I.C	
IC3608	C0FBBD000183	I.C	
IC3612	C0DBEKG00005	I.C	
IC3613	C0DBEKG00005	I.C	
IC3614	C0DBEKG00005	I.C	
IC3618	C0DBEKG00005	I.C	
IC3623	C0DBEKG00005	I.C	
IC3625	C0DBEKG00005	I.C	
IC3627	C0GBG0000053	I.C	
IC3628	C0GBA0000035	I.C	
IC3629	C1AB00002281	I.C	
IC3631	C3ABPJ000071	I.C	
IC3633	C0CBCAC00096	I.C	
IC3634	C0DBZFF00003	I.C	
IC3635	C0GBG0000053	I.C	
IC3641	C0DBCFG00011	I.C	
IC9601	B3NBB0000005	I.C	
IC9602	C0BBBA000076	I.C	
IC9801	C0JBAR000370	I.C	
IC9802	C0JBAR000370	I.C	
IC9803	C0JBAR000370	I.C	
IC9804	C0DBZJD00003	I.C	
IC9805	C0ABBB000190	I.C	
IC9806	C1CB00001750	I.C	
IC9807	C0JBAZ000801	I.C	
IC9808	C0JBAB000621	I.C	
IC9809	C0JBAE000336	I.C	

Ref. No.	Part No.	Part Name & Description	Remarks
IC9810	C1BB00001099	I.C	
		[TRANSISTORS]	
Q2001	UNR221100L	TRANSISTOR	
Q2501	UNR221100L	TRANSISTOR	
Q2503	UNR221100L	TRANSISTOR	
Q2505	UNR221100L	TRANSISTOR	
Q2507	UNR221100L	TRANSISTOR	
Q2508	2SB709A	TRANSISTOR	2SB0709A
Q2509	2SB1218A	TRANSISTOR	
Q2510	B1CBHD000001	TRANSISTOR	
Q2511	B1CBHD000001	TRANSISTOR	
Q2512	2SB1218A	TRANSISTOR	
Q3000	2SD10300TL	TRANSISTOR	
Q3001	2SD10300TL	TRANSISTOR	
Q3002	B1CBHD000001	TRANSISTOR	
Q3003	2SD1819A	TRANSISTOR	2SD1819AW
Q3004	B1CBHD000001	TRANSISTOR	
Q3005	2SD1819A	TRANSISTOR	2SD1819AW
Q3006	2SB1218A	TRANSISTOR	
Q3007	2SB1218A	TRANSISTOR	
Q3008	2SD1819A	TRANSISTOR	2SD1819AW
Q3009	2SB1218A	TRANSISTOR	
Q3010	2SD1819A	TRANSISTOR	2SD1819AW
Q3011	2SB1218A	TRANSISTOR	
Q3012	2SD1819A	TRANSISTOR	2SD1819AW
Q3013	2SB1218A	TRANSISTOR	
Q3014	2SD1819A	TRANSISTOR	2SD1819AW
Q3015	2SB1218A	TRANSISTOR	
Q3016	2SD1819A	TRANSISTOR	2SD1819AW
Q3017	UNR221100L	TRANSISTOR	
Q3018	UNR221100L	TRANSISTOR	
Q3019	UNR221100L	TRANSISTOR	
Q3020	UNR221100L	TRANSISTOR	
Q3021	B1CBHD000001	TRANSISTOR	
Q3022	B1CBHD000001	TRANSISTOR	
Q3031	UNR221100L	TRANSISTOR	
Q3032	2SD1819A	TRANSISTOR	2SD1819AW
Q3033	2SB1218A	TRANSISTOR	
Q3605	B1CBHD000001	TRANSISTOR	
Q3606	B1CBHD000001	TRANSISTOR	
Q3607	UNR221100L	TRANSISTOR	
Q3608	B1DHDD000027	TRANSISTOR	
Q3609	UNR221100L	TRANSISTOR	
Q3611	UNR221100L	TRANSISTOR	
Q3614	UNR221100L	TRANSISTOR	
Q3615	B1DHDD000027	TRANSISTOR	
Q3619	2SD1819A	TRANSISTOR	2SD1819AW
Q3621	2SD1819A	TRANSISTOR	2SD1819AW
Q3622	B1DFED000017	TRANSISTOR	
Q3623	2SD1819A	TRANSISTOR	2SD1819AW
Q3627	2SB1218A	TRANSISTOR	
Q3628	2SB1218A	TRANSISTOR	
Q3629	2SD1819A	TRANSISTOR	2SD1819AW
Q9801	UNR221100L	TRANSISTOR	
Q9802	UNR221100L	TRANSISTOR	
Q9803	UNR221100L	TRANSISTOR	
Q9804	2SD1819A	TRANSISTOR	2SD1819AW
Q9805	2SB710A	TRANSISTOR	2SB0710A
Q9806	2SB1218A	TRANSISTOR	
Q9807	UNR221100L	TRANSISTOR	
Q9808	UNR221100L	TRANSISTOR	
Q9809	2SD1979STX	TRANSISTOR	2SD19790SL
Q9810	2SB1218A	TRANSISTOR	
Q9811	2SD1979STX	TRANSISTOR	2SD19790SL
Q9812	2SB1218A	TRANSISTOR	
		[DIODES]	
D2001	MA157A	DIODE	MA3X157A
D2002	MA157A	DIODE	MA3X157A
D2003	MA157A	DIODE	MA3X157A

Ref. No.	Part No.	Part Name & Description	Remarks
D2004	MA157A	DIODE	MA3X157A
D2005	LNJ308G8TRA	LED	
D2007	LNJ308G8TRA	LED	
D2008	LNJ308G8TRA	LED	
D2501	LNJ308G8TRA	LED	
D2503	LNJ308G8TRA	LED	
D2504	MA157A	DIODE	MA3X157A
D2505	LNJ208R8ARA	LED	
D2506	LNJ208R8ARA	LED	
D2507	B3AGB0000033	DIODE	
D2508	MA152WK	DIODE	MA3X152E
D2509	MA152WK	DIODE	MA3X152E
D2510	LNJ308G8TRA	LED	
D2511	B3AGB0000033	DIODE	
D2512	LNJ308G8TRA	LED	
D3000	MA8056M	DIODE	MAZ80560M
D3001	MA8056M	DIODE	MAZ80560M
D3002	MA8056M	DIODE	MAZ80560M
D3003	MA157A	DIODE	MA3X157A
D3004	MA157A	DIODE	MA3X157A
D3005	MA157A	DIODE	MA3X157A
D3009	MA157A	DIODE	MA3X157A
D3013	EZJZ0V80008B	VARISTOR	
D3014	EZJZ0V80008B	VARISTOR	
D3015	MA157A	DIODE	MA3X157A
D3016	MA157A	DIODE	MA3X157A
D3017	EZJZ0V80008B	VARISTOR	
D3018	EZJZ0V80008B	VARISTOR	
D3019	MA157A	DIODE	MA3X157A
D3020	MA157A	DIODE	MA3X157A
D3021	MA157A	DIODE	MA3X157A
D3022	MA157A	DIODE	MA3X157A
D3023	MA157A	DIODE	MA3X157A
D3024	MA157A	DIODE	MA3X157A
D3025	EZJZ0V171AA	VARISTOR	
D3026	MA8056M	DIODE	MAZ80560M
D3027	MA8056M	DIODE	MAZ80560M
D3036	MA2Z72000L	DIODE	
D3037	MA2Z72000L	DIODE	
D3040	EZJZ0V80008B	VARISTOR	
D3041	EZJZ0V80008B	VARISTOR	
D3042	EZJZ0V80008B	VARISTOR	
D3043	EZJZ0V80008B	VARISTOR	
D3044	EZJZ0V80008B	VARISTOR	
D3045	EZJZ0V80008B	VARISTOR	
D3046	EZJZ0V80008B	VARISTOR	
D3047	EZJZ0V80008B	VARISTOR	
D3048	MA8056M	DIODE	MAZ80560M
D3049	B0HCMM000013	DIODE	
D3050	MAZY12000L	DIODE	
D3611	B0JCPD000026	DIODE	
D3616	B0JCPD000026	DIODE	
D3620	B0JCPD000026	DIODE	
D3621	B0JCPD000026	DIODE	
D3622	B0JCPD000026	DIODE	
D3623	B0JCPD000026	DIODE	
D3624	B0JCPD000026	DIODE	
D3625	B0JCPD000026	DIODE	
D9801	MA157A	DIODE	MA3X157A
D9802	MA157A	DIODE	MA3X157A
D9803	MA8056M	DIODE	MAZ80560M
D9804	MA8056M	DIODE	MAZ80560M
D9805	MA8056M	DIODE	MAZ80560M
D9806	MA8056M	DIODE	MAZ80560M
D9807	MA8056M	DIODE	MAZ80560M
D9808	MA8056M	DIODE	MAZ80560M
D9809	MA8056M	DIODE	MAZ80560M
D9810	MA8056M	DIODE	MAZ80560M
D9811	D4ED1270A006	VARISTOR	
D9812	D4ED1270A006	VARISTOR	
D9813	D4ED1120A002	VARISTOR	
D9814	D4ED1120A002	VARISTOR	
D9815	D4ED1120A002	VARISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
		[COILS]	
L2001	J0JHC0000078	FILTER	
L2002	J0JHC0000078	FILTER	
L2003	J0JHC0000078	FILTER	
L2004	J0JHC0000078	FILTER	
L2005	J0JHC0000078	FILTER	
L2006	J0JHC0000078	FILTER	
L2502	ELJFA6R8JFB	COIL	
L2503	ELJFA470JFB	COIL	
L2504	J0JHC0000078	FILTER	
L2505	ELJFA6R8JFB	COIL	
L2506	J0JHC0000078	FILTER	
L2528	J0JDC0000083	FILTER	
L2529	J0JDC0000083	FILTER	
L2544	J0JHC0000078	FILTER	
L3003	ELJFA100JFB	COIL	
L3004	ELJFA100JFB	COIL	
L3005	J0JHC0000078	FILTER	
L3006	J0JHC0000078	FILTER	
L3008	J0JHC0000078	FILTER	
L3009	G1C100K00031	COIL	
L3010	J0JHC0000078	FILTER	
L3011	J0JHC0000078	FILTER	
L3012	J0JHC0000078	FILTER	
L3013	J0JHC0000078	FILTER	
L3015	J0JHC0000078	FILTER	
L3016	J0JCC0000238	FILTER	
L3017	J0JHC0000078	FILTER	
L3018	J0JDC0000083	FILTER	
L3022	J0JHC0000078	FILTER	
L3023	J0JHC0000078	FILTER	
L3025	J0JHC0000078	FILTER	
L3026	J0JHC0000078	FILTER	
L3030	J0JHC0000078	FILTER	
L3031	J0JHC0000078	FILTER	
L3043	J0JHC0000078	FILTER	
L3045	J0JHC0000078	FILTER	
L3046	J0JHC0000078	FILTER	
L3047	J0JHC0000078	FILTER	
L3049	J0JHC0000078	FILTER	
L3050	ERJ3GEY0R00	M 0 OHM, 1/16W	
L3051	J0MAB0000176	COIL	
L3052	J0MAB0000176	COIL	
L3053	J0MAB0000176	COIL	
L3054	J0MAB0000176	COIL	
L3057	J0JHC0000078	FILTER	
L3058	ELJFA470JFB	COIL	
L3059	J0JHC0000078	FILTER	
L3602	J0JHC0000078	FILTER	
L3605	J0JHC0000078	FILTER	
L3606	J0JHC0000078	FILTER	
L3607	J0JHC0000078	FILTER	
L3608	J0JHC0000078	FILTER	
L3610	J0JHC0000078	FILTER	
L3611	ELJFA100JFB	COIL	
L3612	J0JHC0000078	FILTER	
L3613	J0JHC0000078	FILTER	
L3614	J0JHC0000078	FILTER	
L3615	J0JHC0000078	FILTER	
L3616	J0JHC0000078	FILTER	
L3617	J0JHC0000078	FILTER	
L3618	J0JHC0000078	FILTER	
L3619	J0JHC0000078	FILTER	
L3620	J0JHC0000078	FILTER	
L3621	J0JHC0000078	FILTER	
L3622	J0JHC0000078	FILTER	
L3623	J0JCC0000168	FILTER	
L3624	J0JCC0000168	FILTER	
L3625	J0JHC0000078	FILTER	
L3626	J0JHC0000078	FILTER	
L3627	J0JHC0000078	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
L3628	J0JHC0000078	FILTER	
L3629	J0JHC0000078	FILTER	
L3632	ELJFA470JFB	COIL	
L3633	ELJFA270JFB	COIL	
L3634	ELJFA270JFB	COIL	
L3635	J0JHC0000078	FILTER	
L3636	J0JHC0000078	FILTER	
L9801	J0JCC0000364	COIL	
L9802	J0JCC0000364	COIL	
L9803	J0JCC0000364	COIL	
L9804	J0JCC0000364	COIL	
L9805	J0JCC0000364	COIL	
L9806	J0JCC0000364	COIL	
L9807	J0JCC0000364	COIL	
L9808	J0JCC0000364	COIL	
L9809	J0JCC0000364	COIL	
L9810	J0JCC0000364	COIL	
L9812	J0JCC0000364	COIL	
L9813	J0JCC0000364	COIL	
L9819	J0JCC0000364	COIL	
L9820	J0JCC0000364	COIL	
L9821	J0JCC0000364	COIL	
L9822	J0JCC0000364	COIL	
L9823	J0JCC0000168	FILTER	
L9824	J0JCC0000364	COIL	
L9825	J0JCC0000364	COIL	
L9826	J0JCC0000364	COIL	
L9827	J0JCC0000364	COIL	
L9831	J0JCC0000168	FILTER	
L9837	J0JCC0000364	COIL	
L9838	J0JCC0000364	COIL	
L9839	J0JCC0000364	COIL	
L9840	J0JCC0000364	COIL	
L9841	J0JCC0000364	COIL	
L9842	J0JCC0000364	COIL	
L9843	J0JCC0000364	COIL	
L9844	J0JCC0000364	COIL	
L9845	J0JCC0000364	COIL	
L9846	J0JCC0000364	COIL	
L9847	J0JCC0000364	COIL	
L9848	J0JCC0000364	COIL	
L9849	J0JCC0000364	COIL	
L9850	J0JCC0000364	COIL	
L9851	J0JCC0000364	COIL	
L9951	J0JJC0000022	EMI FILTER	
L9952	J0JDC0000083	FILTER	
FL2511	J0HABB000021	FILTER	
FL2512	J0HABB000021	FILTER	
FL2513	J0HABB000021	FILTER	
FL2514	J0HABB000021	FILTER	
FL2515	J0HABB000021	FILTER	
FL2516	J0HABB000021	FILTER	
FL2517	J0HABB000021	FILTER	
FL2518	J0HABB000021	FILTER	
FL2527	J0HABB000021	FILTER	
FL2536	J0HABB000021	FILTER	
FL2537	J0HABB000021	FILTER	
FL2538	J0HABB000021	FILTER	
FL2539	J0HABB000021	FILTER	
FL2540	J0HABB000021	FILTER	
FL2541	J0HABB000021	FILTER	
FL2542	J0HABB000021	FILTER	
FL2543	J0HABB000021	FILTER	
FL2544	J0HABB000021	FILTER	
FL2545	J0HABB000021	FILTER	
FL2546	J0HABB000021	FILTER	
FL2547	J0HABB000021	FILTER	
FL2548	J0HABB000021	FILTER	
FL3003	J0HABC000011	FILTER	
FL3004	J0HABC000011	FILTER	
FL3005	J0HABC000011	FILTER	
FL3006	J0HABC000011	FILTER	
FL3007	J0HABC000011	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
FL3008	J0HABC000011	FILTER	
FL3019	J0HABB000021	FILTER	
FL3020	J0HABB000021	FILTER	
FL3021	J0HABB000021	FILTER	
FL3022	J0HABB000021	FILTER	
FL3023	J0HABB000021	FILTER	
FL3024	J0HABB000021	FILTER	
FL3025	J0HABB000021	FILTER	
FL3026	J0HABB000021	FILTER	
FL3027	J0HABB000021	FILTER	
FL3030	J0HABB000015	FILTER	
FL3031	J0HABB000015	FILTER	
FL3032	J0HAAC000045	FILTER	
FL3501	J0JCC0000364	FILTER	
FL3502	J0JCC0000364	FILTER	
FL3503	J0JCC0000364	FILTER	
FL3504	J0JCC0000364	FILTER	
FL3505	J0JCC0000364	FILTER	
FL3506	J0JCC0000364	FILTER	
FL3507	J0JCC0000364	FILTER	
FL9801	J0HABB000021	FILTER	
FL9802	J0HABB000021	FILTER	
FL9803	J0HABB000021	FILTER	
FL9804	J0HABB000021	FILTER	
FL9805	ELKE101FA	EMI FILTER	
FL9806	J0HABB000021	FILTER	
FL9807	J0HABB000021	FILTER	
FL9808	J0HABB000021	FILTER	
FL9809	J0HABB000021	FILTER	
FL9810	J0HABB000021	FILTER	
FL9811	J0HABB000021	FILTER	
FL9812	J0HABB000021	FILTER	
FL9813	J0HABB000021	FILTER	
FL9841	J0HABB000021	FILTER	
[RESISTORS]			
R2000	EXB38V102J	RESISTOR ARRAY	
R2001	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2005	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2006	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2011	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2015	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2018	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2019	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2025	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2028	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2029	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2030	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2032	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2033	D1HG2208A002	RESISTOR	
R2034	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2037	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2038	ERJ6ENF2002	M 20KOHM, 1/10W	
R2039	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2040	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2041	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2042	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2043	ERJ6ENF2492	M24.9KOHM, 1/10W	
R2044	D1HG2208A002	RESISTOR	
R2046	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2048	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2051	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2052	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2053	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2055	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2056	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2057	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2059	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2060	D1HG2208A002	RESISTOR	
R2065	D1HG2208A002	RESISTOR	
R2067	D1HG2208A002	RESISTOR	
R2069	EXB28V220J	RESISTOR ARRAY	

Ref. No.	Part No.	Part Name & Description	Remarks
R2070	D1HG2208A002	RESISTOR	
R2075	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2076	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2078	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2079	D1HG2208A002	RESISTOR	
R2081	D1HG2208A002	RESISTOR	
R2083	D1HG2208A002	RESISTOR	
R2089	EXB28V220J	RESISTOR ARRAY	
R2090	D1HG2208A002	RESISTOR	
R2092	D1HG2208A002	RESISTOR	
R2094	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2096	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2097	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2098	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2099	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2100	D1HG2208A002	RESISTOR	
R2102	D1HG2208A002	RESISTOR	
R2104	EXB28V220J	RESISTOR ARRAY	
R2105	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2106	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2107	EXB28V220J	RESISTOR ARRAY	
R2109	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2112	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2113	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2119	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2120	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2129	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2130	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2132	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R2137	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2139	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2140	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2141	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2142	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2143	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2147	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2150	ERJ6ENF2491	M2.49KOHM, 1/10W	
R2151	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2152	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2153	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2154	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2160	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2161	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2162	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2163	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2164	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2165	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2166	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2168	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R2169	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R2172	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2173	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2174	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2177	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2180	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2181	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2182	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2183	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2184	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2185	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2187	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2188	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2191	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2192	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2193	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2194	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2195	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2197	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2198	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2201	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2202	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2203	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2204	ERJ3GEY0R00	M 0 OHM, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2205	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2220	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2222	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2232	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2233	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2235	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2236	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2238	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2240	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2241	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2505	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2506	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2507	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2508	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2509	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2510	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2511	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2512	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2513	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2514	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2515	EXB38V472J	RESISTOR ARRAY	
R2516	EXB38V472J	RESISTOR ARRAY	
R2517	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R2518	ERJ6ENF1501V	RESISTOR	
R2519	ERJ6ENF1501V	RESISTOR	
R2520	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2521	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2522	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R2523	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2524	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R2525	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2526	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R2527	ERJ6ENF3302	M 33KOHM, 1/10W	
R2528	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R2529	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2530	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2531	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R2532	ERJ6ENF1501V	RESISTOR	
R2533	ERJ6ENF1501V	RESISTOR	
R2534	ERJ3GEYJ271V	RESISTOR	
R2535	ERJ3GEYJ271V	RESISTOR	
R2536	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2537	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2538	D1HG2208A002	RESISTOR	
R2539	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R2540	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2541	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2542	D1HG2208A002	RESISTOR	
R2543	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R2544	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R2545	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R2546	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R2547	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R2548	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R2550	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R2551	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2552	ERJ6ENF3302	M 33KOHM, 1/10W	
R2553	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2554	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R2557	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2558	EXB28V102J	RESISTOR ARRAY	
R2559	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2560	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2561	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2562	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2563	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2564	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2565	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2566	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2567	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2568	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2569	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2570	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2571	EXB28V103J	RESISTOR ARRAY	
R2572	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2573	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2574	EXB28V103J	RESISTOR ARRAY	
R2575	EXB28V103J	RESISTOR ARRAY	
R2576	EXB28V103J	RESISTOR ARRAY	
R2577	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2580	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2581	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2582	EXB28V103J	RESISTOR ARRAY	
R2583	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2584	ERJ3GEYJ821V	RESISTOR	
R2585	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2586	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2587	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2588	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2589	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2590	D1HG2208A002	RESISTOR	
R2596	D1HG2208A002	RESISTOR	
R2597	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2606	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2609	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2610	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2612	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2614	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2615	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2622	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2629	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2631	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2637	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2642	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2643	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2644	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2645	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2646	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2647	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2648	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R2649	ERJ3GEYJ821V	RESISTOR	
R2650	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2651	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2652	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2653	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2654	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R2655	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2656	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2657	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2658	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2659	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R2660	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R2661	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2663	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2665	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2666	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2667	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2673	EXB38V472J	RESISTOR ARRAY	
R2674	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2676	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2677	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2678	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2684	EXB38V472J	RESISTOR ARRAY	
R2685	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2686	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2688	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2699	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2700	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2707	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2708	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2709	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2710	ERJ3GEYJ561	M 560 OHM,J,1/16W	
R2711	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2712	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002

Ref. No.	Part No.	Part Name & Description	Remarks
R2713	ERJ3GEYJ184V	RESISTOR	
R2714	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2717	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2718	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2719	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2720	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2721	ERJ3GEYJ821V	RESISTOR	
R2723	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2724	ERJ3GEYJ821V	RESISTOR	
R3001	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3014	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3019	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3021	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3022	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3023	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3024	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3025	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3026	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3027	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3028	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3029	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3030	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3032	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3033	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3034	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3035	ERJ6GEYJ471V	RESISTOR	
R3036	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3037	ERJ6ENF4700	M 470 OHM, 1/10W	
R3039	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3040	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3044	ERJ6GEYJ471V	RESISTOR	
R3045	ERJ3EKF8200V	RESISTOR	
R3048	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3050	ERJ6ENF1501V	RESISTOR	
R3051	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3052	ERJ6GEYJ331V	RESISTOR	
R3053	ERJ6GEYJ331V	RESISTOR	
R3054	ERJ6GEYJ221V	RESISTOR	
R3055	ERJ6GEYJ151V	RESISTOR	
R3056	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3057	ERJ6ENF4700	M 470 OHM, 1/10W	
R3058	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3059	ERJ6ENF1001	M 1KOHM, 1/10W	
R3060	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3061	ERJ6ENF1001	M 1KOHM, 1/10W	
R3062	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3063	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3064	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3065	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3066	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3067	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3068	ERJ6ENF4700	M 470 OHM, 1/10W	
R3069	ERJ6ENF1500	M 150 OHM, 1/10W	
R3070	ERJ6ENF1500	M 150 OHM, 1/10W	
R3071	ERJ6ENF1200	M 120 OHM, 1/10W	
R3072	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3073	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3076	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R3077	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R3078	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3079	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3081	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3085	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3086	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3087	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3088	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3091	D1HG5608A002	RESISTOR	
R3094	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R3095	ERJ3GEYJ391V	M 390 OHM,J,1/16W	
R3100	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3101	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3102	EXB28V560J	RESISTOR ARRAY	
R3103	EXB28V220J	RESISTOR ARRAY	

Ref. No.	Part No.	Part Name & Description	Remarks
R3104	EXB28V220J	RESISTOR ARRAY	
R3105	D1HG2208A002	RESISTOR	
R3106	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3107	EXB28V220J	RESISTOR ARRAY	
R3109	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3112	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3113	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3114	EXB28V102J	RESISTOR ARRAY	
R3116	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R3117	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R3118	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3119	EXB28V220J	RESISTOR ARRAY	
R3120	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3121	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3122	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3123	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3124	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3125	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3126	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3127	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3128	EXB28V102J	RESISTOR ARRAY	
R3129	EXB28V220J	RESISTOR ARRAY	
R3130	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3131	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3132	EXB38V101J	RESISTOR ARRAY	
R3133	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3134	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3135	D1HG5608A002	RESISTOR	
R3137	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3138	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3139	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3140	EXB28V560J	RESISTOR ARRAY	
R3141	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3142	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3143	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3145	D1HG2208A002	RESISTOR	
R3146	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3147	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3148	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3149	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3150	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3151	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3152	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3153	D1HG2208A002	RESISTOR	
R3154	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3155	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3156	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3157	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3158	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3159	D1HG2208A002	RESISTOR	
R3160	D1HG2208A002	RESISTOR	
R3161	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3162	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3163	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3164	ERJ6GEYJ271V	RESISTOR	D0GD271JA003
R3165	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3166	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3167	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3168	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3169	ERJ6GEYJ332V	RESISTOR	
R3170	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3171	ERJ6GEYJ332V	RESISTOR	
R3172	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3173	ERJ6GEYJ271V	RESISTOR	D0GD271JA003
R3174	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3175	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3176	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3177	ERJ6GEYJ3R3V	RESISTOR	D0GD3R3JA003
R3178	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3179	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3180	ERJ3EKF2200	M 220 OHM, 1/16W	
R3181	ERJ3EKF2200	M 220 OHM, 1/16W	
R3182	ERJ3EKF2200	M 220 OHM, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3183	ERJ3EKF2200	M 220 OHM, 1/16W	
R3184	ERJ6GEYJ560	M 56 OHM,J,1/10W	
R3185	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3186	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3187	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3188	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3189	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3191	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3192	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3193	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3194	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3195	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3196	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3197	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3198	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3199	ERJ6GEYJ103V	RESISTOR	
R3200	EXB28V220J	RESISTOR ARRAY	
R3201	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3202	D1HG2208A002	RESISTOR	
R3203	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3204	EXB28V220J	RESISTOR ARRAY	
R3205	D1HG2208A002	RESISTOR	
R3206	ERJ3GEYJ273V	RESISTOR	D0GB273JA002
R3208	ERJ3GEYJ182V	M 1.8KOHM,J,1/16W	
R3209	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3210	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R3211	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3212	ERJ3GEYJ182V	M 1.8KOHM,J,1/16W	
R3213	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3214	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3215	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3216	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3217	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3218	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3219	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3220	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3221	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3222	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3223	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3224	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3225	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3226	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3227	ERJ6ENF2741	M2.74KOHM, 1/10W	
R3228	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3229	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3230	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3231	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3232	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3233	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3234	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3235	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3236	ERJ3GEYJ680	M 68 OHM,J,1/16W	ERJ3GEYJ680V
R3237	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3238	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3240	D1HG2208A002	RESISTOR	
R3241	D1HG2208A002	RESISTOR	
R3242	D1HG2208A002	RESISTOR	
R3243	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3244	D1HG2208A002	RESISTOR	
R3245	ERJ6ENF5620	RESISTOR	
R3246	ERJ1TYJ221	M 220 OHM, 1W	
R3247	ERJ1TYJ221	M 220 OHM, 1W	
R3248	D1HG2208A002	RESISTOR	
R3249	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3250	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3251	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3252	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3253	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3254	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3255	D1HG2208A002	RESISTOR	
R3256	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3257	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3258	EXB28V220J	RESISTOR ARRAY	

Ref. No.	Part No.	Part Name & Description	Remarks
R3259	D1HG2208A002	RESISTOR	
R3260	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3263	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3264	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3268	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3270	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3300	EXB28V560J	RESISTOR ARRAY	
R3312	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3320	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3416	EXB38V472J	RESISTOR ARRAY	
R3417	EXB38V472J	RESISTOR ARRAY	
R3429	EXB28V220J	RESISTOR ARRAY	
R3446	EXB28V220J	RESISTOR ARRAY	
R3459	EXB38V101J	RESISTOR ARRAY	
R3460	EXB28V220J	RESISTOR ARRAY	
R3461	D1HG2208A002	RESISTOR	
R3462	D1HG2208A002	RESISTOR	
R3463	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3507	EXB28V220J	RESISTOR ARRAY	
R3515	EXB38V472J	RESISTOR ARRAY	
R3516	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3517	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3518	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3519	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3520	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3537	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3542	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3543	ERJ6GEYJ221V	RESISTOR	
R3544	ERJ6GEYJ473V	RESISTOR	
R3545	ERJ6GEYJ103V	RESISTOR	
R3546	ERJ6GEYJ104V	RESISTOR	
R3547	ERJ6GEYJ102V	RESISTOR	
R3548	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3561	EXB28V220J	RESISTOR ARRAY	
R3575	EXB28V220J	RESISTOR ARRAY	
R3576	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3577	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3580	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3581	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3582	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3583	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3685	EXB38V472J	RESISTOR ARRAY	
R3686	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3691	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3692	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3693	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3694	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3695	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3696	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3697	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3698	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3699	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3700	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3701	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3703	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3709	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3710	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3711	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3712	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3723	ERJ6ENF2001	M 2KOHM, 1/10W	
R3724	ERJ6ENF1801	M 1.8KOHM, 1/10W	
R3725	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3726	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3727	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3728	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3733	ERJ6ENF2001	M 2KOHM, 1/10W	
R3734	ERJ6ENF1501V	RESISTOR	
R3740	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3741	ERJ6ENF2700	M 270 OHM, 1/10W	
R3745	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R3746	ERJ3GEYJ103	M 10K OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3750	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3752	ERJ6ENF2001	M 2KOHM, 1/10W	
R3753	ERJ6ENF1501V	RESISTOR	
R3758	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3759	ERJ6ENF2700	M 270 OHM, 1/10W	
R3760	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3768	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R3769	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3774	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3775	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3776	ERJ6ENF2700	M 270 OHM, 1/10W	
R3777	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R3778	ERJ6ENF2001	M 2KOHM, 1/10W	
R3779	ERJ6ENF1501V	RESISTOR	
R3782	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3783	ERJ6ENF2700	M 270 OHM, 1/10W	
R3786	ERJ3GEYJ822V	RESISTOR	D0GB822JA002
R3787	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3799	ERJ1TYJ221	M 220 OHM, 1W	
R3800	ERJ1TYJ221	M 220 OHM, 1W	
R3816	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3818	ERJ6ENF2001	M 2KOHM, 1/10W	
R3819	ERJ6ENF1501V	RESISTOR	
R3822	ERJ6ENF6201	M 6.2KOHM, 1/10W	
R3827	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R3836	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3845	D1HG2208A002	RESISTOR	
R3847	D1HG2208A002	RESISTOR	
R3862	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3863	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3864	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3865	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3866	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3869	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R3870	ERJ3GEYJ750V	RESISTOR	
R3871	ERJ3GEYJ750V	RESISTOR	
R3873	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3874	ERJ3GEYJ560	M 56 OHM,J,1/16W	
R3883	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3886	ERJ3GEYJ750V	RESISTOR	
R3887	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R3888	ERJ3GEYJ750V	RESISTOR	
R3889	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3892	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3893	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3901	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3902	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3903	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3904	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R3905	ERJ3GEYJ112V	RESISTOR	
R3906	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3907	ERJ3GEYJ821V	RESISTOR	
R3908	ERJ3GEYJ681	M 680 OHM,J,1/16W	
R3909	ERJ6ENF1000	M 100 OHM, 1/10W	
R3910	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3911	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3912	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3913	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3915	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3922	D1HG2208A002	RESISTOR	
R3926	D1HG2208A002	RESISTOR	
R3928	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3929	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3930	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3936	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3938	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3978	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3982	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R9601	ERJ6ENF4300	RESISTOR	
R9602	ERJ3GEYJ134V	RESISTOR	
R9603	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R9604	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9606	ERJ3GEYJ220	M 22 OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R9813	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9814	ERJ3GEYJ154	M 150 OHM,J,1/16W	
R9815	ERJ3GEYJ124	M 120KOHM,J,1/16W	
R9816	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9817	ERJ3GEYJ154	M 150 OHM,J,1/16W	
R9818	ERJ3GEYJ124	M 120KOHM,J,1/16W	
R9819	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9831	EXB38V103J	RESISTOR ARRAY	
R9840	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R9841	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R9842	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9843	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9844	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9845	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9846	ERJ3GEYJ333	M 33K OHM,J,1/16W	
R9847	ERJ3GEYJ333	M 33K OHM,J,1/16W	
R9848	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R9849	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R9850	ERD25VJ1R0T	RESISTOR	
R9851	ERJ3GEYJ223	M 22K OHM,J,1/16W	
R9852	ERJ3GEYJ182V	M 1.8KOHM,J,1/16W	
R9853	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9855	D1HG1018A002	RESISTOR	
R9856	ERJ6GEYJ101V	RESISTOR	
R9857	ERJ6GEYJ391V	RESISTOR	D0GD391JA003
R9858	ERJ3GEYJ223	M 22K OHM,J,1/16W	
R9859	ERJ6GEYJ2R2V	RESISTOR	
R9860	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R9861	ERJ6GEYJ101V	RESISTOR	
R9862	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R9863	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9864	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R9865	ERJ6GEYJ101V	RESISTOR	
R9866	ERJ6GEYJ101V	RESISTOR	
R9867	ERJ6GEYJ101V	RESISTOR	
R9868	ERJ6GEYJ101V	RESISTOR	
R9869	ERJ6GEYJ101V	RESISTOR	
R9870	ERJ3GEYJ182V	M 1.8KOHM,J,1/16W	
R9871	EXB38V103J	RESISTOR ARRAY	
R9872	EXB38V103J	RESISTOR ARRAY	
R9875	EXB38V124JV	RESISTOR	
R9876	EXB38V102J	RESISTOR ARRAY	
R9877	EXB38V154JV	RESISTOR	
R9878	EXB38V124JV	RESISTOR	
R9879	EXB38V154JV	RESISTOR	
R9880	EXB38V102J	RESISTOR ARRAY	
R9881	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9882	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9883	ERJ3GEY0R00	M 0 OHM, 1/16W	
R9884	ERJ3GEY0R00	M 0 OHM, 1/16W	
R9886	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R9891	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9892	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9893	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9894	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R9895	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R9896	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R9897	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R9898	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R9899	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R9950	ERJ3GEYJ470	M 47 OHM,J,1/16W	
[CAPACITORS]			
C2002	F2G0J4700010	CAPACITOR	
C2003	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2004	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2005	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2006	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2007	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2008	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2009	ECJ1VC1H150J	C 15PF, J, 50V	
C2010	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C2011	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2012	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2013	ECJ1VC1H150J	C 15PF, J, 50V	
C2014	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2015	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2016	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2017	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2018	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2019	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2020	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2021	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2022	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2023	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2024	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2025	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2026	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2027	F2G0J4700010	CAPACITOR	
C2028	ECJ1VC1H100C	C 10PF, 50V	
C2029	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2030	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2031	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2032	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2033	F2G0J4700010	CAPACITOR	
C2034	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2035	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2036	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2037	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2038	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2039	F2G0J4700010	CAPACITOR	
C2041	F2G0J4700010	CAPACITOR	
C2042	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2043	F2G0J4700010	CAPACITOR	
C2044	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2045	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2046	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2047	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2048	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2049	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2050	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2051	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2052	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2053	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2054	F2G0J4700010	CAPACITOR	
C2055	EEEHB0G221P	E 220UF, 4V	
C2056	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2057	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2058	F2G0J4700010	CAPACITOR	
C2059	F2G0J4700010	CAPACITOR	
C2060	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2061	F2G0J1010013	CAPACITOR	
C2062	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2063	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2064	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2076	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2077	EEFCD0K330R	CAPACITOR	
C2501	F2G0J4700010	CAPACITOR	
C2502	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2503	F2G0J1010013	CAPACITOR	
C2504	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2505	ECJ1VC1H100C	C 10PF, 50V	
C2506	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2507	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2508	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2509	ECJ1VC1H100C	C 10PF, 50V	
C2510	ECJ1VC1H150J	C 15PF, J, 50V	
C2511	ECJ1VC1H150J	C 15PF, J, 50V	
C2512	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2513	F2G0J4700010	CAPACITOR	
C2514	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2515	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2516	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2517	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2518	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C2519	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2520	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2521	F2G0J4700010	CAPACITOR	
C2522	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2523	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2524	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2525	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2526	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2527	ECJ1VC1H471J	C 470PF, J, 50V	
C2528	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2529	F2G0J4700010	CAPACITOR	
C2530	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2531	ECJ1VC1H100C	C 10PF, 50V	
C2532	ECJ1VC1H100C	C 10PF, 50V	
C2533	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2534	F2G0J4700010	CAPACITOR	
C2535	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2536	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2537	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2538	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2539	F2G0J4700010	CAPACITOR	
C2540	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2541	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2542	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2543	F2G0J4700010	CAPACITOR	
C2544	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2545	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2546	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2547	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2548	ECJ1VF1A105Z	C 1UF, Z, 50V	
C2549	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2550	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2551	ECJ1VC1H100C	C 10PF, 50V	
C2552	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2553	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2554	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2555	ECJ1VC1H101J	C 100PF, J, 50V	
C2556	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2558	ECJ1VC1H101J	C 100PF, J, 50V	
C2560	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2561	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2562	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2563	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2564	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2570	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2579	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2580	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2581	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2583	EEEHB0G221P	E 220UF, 4V	
C2584	EEEHB0G221P	E 220UF, 4V	
C2585	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2586	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2587	ECJ1VF1A105Z	C 1UF, Z, 50V	
C2589	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3000	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3001	EEEHP1E4R7R	CAPACITOR	
C3002	ECJ0EB1H102K	C 1000PF, 50V	
C3003	EEEHP1E4R7R	CAPACITOR	
C3004	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3007	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3010	F2G1C1000013	CAPACITOR	
C3011	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3014	ECJ1VC1H680J	CAPACITOR	
C3017	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3018	ECJ1VC1H680J	CAPACITOR	
C3019	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3020	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3023	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3025	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3027	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3028	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3029	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3030	ECJ1VB0J105K	C 1UF,Z, 6.3V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3032	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3033	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3034	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3035	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3036	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3037	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3038	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3039	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3040	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3041	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3042	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3043	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3044	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3045	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3046	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3047	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3048	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3049	ECJ1VC1H150J	C 15PF, J, 50V	
C3051	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3052	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3053	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3054	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3055	ECJ1VC1H150J	C 15PF, J, 50V	
C3056	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3058	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3059	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3060	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3061	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3062	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3063	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3064	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3065	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3066	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3067	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3068	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3069	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3070	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3071	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3072	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3074	EEEHP1C100R	E 10UF, 16V	
C3075	EEEHP1C100R	E 10UF, 16V	
C3076	F2G1C1000013	CAPACITOR	
C3077	F2G1C1000013	CAPACITOR	
C3078	EEEHB0J330R	E 33UF, 6.3V	
C3079	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3080	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3081	EEEHB0J330R	E 33UF, 6.3V	
C3082	EEEHP1C100R	E 10UF, 16V	
C3083	EEEHP1C100R	E 10UF, 16V	
C3084	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3085	EEEHP0J470P	E 47UF, 6.3V	
C3086	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3087	EEEHP0J470P	E 47UF, 6.3V	
C3088	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3089	EEEHP0J470P	E 47UF, 6.3V	
C3090	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3091	EEEHP0J470P	E 47UF, 6.3V	
C3092	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3093	EEEHP0J470P	E 47UF, 6.3V	
C3094	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3095	EEEHP0J470P	E 47UF, 6.3V	
C3097	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3099	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3100	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3101	F2G1C1000013	CAPACITOR	
C3104	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3105	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3106	ECJ1VC1H151J	CAPACITOR	
C3107	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3108	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3109	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3110	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C3111	ECJ1VB1H472K	C 4700PF, K, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3112	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3113	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3114	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3115	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3116	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3117	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3118	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3119	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3120	ECJ1VC1H221J	CAPACITOR	
C3121	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3122	ECJ2XC1H391J	C 390PF, J, 50V	
C3123	F2G0J4700010	CAPACITOR	
C3124	ECJ1VC1H181J	CAPACITOR	
C3125	F2G1C1000013	CAPACITOR	
C3126	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3128	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3129	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3130	F2G0J4700010	CAPACITOR	
C3131	ECJ1VF1H473Z	CAPACITOR	
C3132	ECJ1VF1H473Z	CAPACITOR	
C3133	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3134	ECJ1VF1H473Z	CAPACITOR	
C3135	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3136	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3137	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3138	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3139	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3140	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3141	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3142	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3143	ECJ0EB1C822K	CAPACITOR	
C3144	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3145	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3146	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3147	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3148	ECJ0EB1A823K	CAPACITOR	
C3149	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3150	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3151	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3152	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3153	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3154	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3155	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3156	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3157	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3158	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3159	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3160	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3161	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3162	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3163	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3164	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3165	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3166	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3167	ECJ1VC1H220J	CAPACITOR	
C3168	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3169	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3170	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3172	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3173	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3174	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3175	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3176	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3177	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3178	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3179	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3180	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3181	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3182	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3183	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3184	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3185	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3186	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3187	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3188	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3189	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3190	ECJ1VC1H150J	C 15PF, J, 50V	
C3191	ECJ1VC1H680J	C 68PF, J, 50V	
C3192	ECJ1VC1H470J	CAPACITOR	
C3193	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3194	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3195	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3196	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3197	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3198	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3199	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3200	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3202	F4D276050004	CAPACITOR	
C3203	F4D276050004	CAPACITOR	
C3204	F4D276050004	CAPACITOR	
C3205	F4D276050004	CAPACITOR	
C3206	F4D276050004	CAPACITOR	
C3300	F2G1E4R70007	CAPACITOR	
C3304	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3305	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3306	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3307	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3308	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3310	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3312	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3313	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3314	F2G0J4700010	CAPACITOR	
C3315	EEEHB0G221P	E 220UF, 4V	
C3317	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3319	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3322	F2G1E4R70007	CAPACITOR	
C3323	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3326	EEEHB0G221P	E 220UF, 4V	
C3339	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3362	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3384	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3385	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3390	EEEHB0J330R	E 33UF, 6.3V	
C3392	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3393	EEEHP1C100R	E 10UF, 16V	
C3394	EEEHB0J330R	E 33UF, 6.3V	
C3397	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3398	ECJ1VC1H101J	C 100PF, J, 50V	
C3399	ECJ1VC1H101J	C 100PF, J, 50V	
C3400	F2G1E4R70007	CAPACITOR	
C3401	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3402	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3431	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3432	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3640	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3644	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3645	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3646	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3650	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3651	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3652	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3653	ECJ1VC1H101J	C 100PF, J, 50V	
C3654	F2G1E3300010	CAPACITOR	
C3657	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3658	F2G1E3300010	CAPACITOR	
C3659	F2G1E3300010	CAPACITOR	
C3660	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3661	F2G1E3300010	CAPACITOR	
C3662	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3663	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3667	F2G1E3300010	CAPACITOR	
C3669	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3676	F2G1E3300010	CAPACITOR	
C3677	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3678	ECJ1VC1H100C	C 10PF, 50V	
C3679	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3680	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3681	ECJ1VC1H101J	C 100PF, J, 50V	
C3684	F2G0J4700010	CAPACITOR	
C3689	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3690	ECJ1VC1H471J	C 470PF, J, 50V	
C3691	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3692	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3693	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3694	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3695	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3696	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3697	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3701	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3702	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3703	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3704	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3705	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3706	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3707	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3708	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3709	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3710	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3711	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3712	F2G0J1010013	CAPACITOR	
C3716	ECJ1VB1A334K	CAPACITOR	
C3717	ECJ1VB1A334K	CAPACITOR	
C3718	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3719	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3720	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3721	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3722	ECJ2YF1C225Z	C 2.2UF, Z, 16V	
C3723	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3724	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3725	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3726	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3727	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3728	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3729	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3730	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3731	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3732	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3733	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3734	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3735	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3736	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3737	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3738	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3739	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3740	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3741	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3742	ECJ2YF1C225Z	C 2.2UF, Z, 16V	
C3744	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3745	ECJ1VC1H121J	CAPACITOR	
C3746	ECJ1VC1H471J	C 470PF, J, 50V	
C3747	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3748	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3749	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3750	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3751	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3752	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3753	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3754	ECJ2YF1C225Z	C 2.2UF, Z, 16V	
C3755	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3756	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3757	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3759	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3760	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3762	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3764	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3765	EEEHB0G101R	E 100UF, 4V	
C3766	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3767	EEEHB0G101R	E 100UF, 4V	
C3769	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3781	F2G1E4R70007	CAPACITOR	
C3785	F2G0J4700010	CAPACITOR	
C3788	EEEHB0G101R	E 100UF, 4V	
C3790	F2G0J1010013	CAPACITOR	
C3791	F2G0J1010013	CAPACITOR	
C3792	F2G1E4R70007	CAPACITOR	
C3794	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3795	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3799	ECJ1VB1H103K	C 0.01UF, K, 50V	
C3800	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3803	ECJ1VF1A105Z	C 1UF, Z, 50V	
C3804	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3805	ECJ1VB0J105K	C 1UF,Z, 6.3V	
C3806	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3883	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9602	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9701	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9801	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9802	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9803	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9804	EEEHB0J470R	E 47UF, 6.3V	
C9805	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9806	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9807	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9808	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9809	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9810	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9811	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9812	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9813	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9814	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9815	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9816	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9817	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9818	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9819	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9820	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9821	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9822	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9823	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9824	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9825	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9826	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9827	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9828	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9829	ECJ2YF1C225Z	C 2.2UF, Z, 16V	
C9830	EEEHB1E330P	E 33UF, 25V	
C9831	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9832	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9833	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9834	EEEHP1C100R	E 10UF, 16V	
C9835	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9837	EEEHB1C101P	CAPACITOR	
C9838	EEEHB1C101P	CAPACITOR	
C9840	EEEHP1C100R	E 10UF, 16V	
C9841	EEEHB0J470R	E 47UF, 6.3V	
C9842	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9843	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9844	ECJ3YF1C475Z	C 4.7UF, Z, 16V	
C9845	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9846	EEEHB1C220R	CAPACITOR	
C9847	ECJ2FF1A106Z	C 10UF, 10V	
C9848	ECJ2FF1A106Z	C 10UF, 10V	
C9951	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C9952	F2G0J4700010	CAPACITOR	
[OTHERS]			
A1	K1KA03BA0086	3P CONNECTOR	
A3	K1MN18B00062	18P CONNECTOR	
A5	K1KA11BA0086	11P CONNECTOR	
A7	K1KA02BA0085	2P CONNECTOR	
A10	K1KA02B00247	2P CONNECTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
A11	K1KA03AA0104	3P CONNECTOR	
A21	K1KA04BA0014	4P CONNECTOR	
A22	K1KA08BA0047	8P CONNECTOR	
A23	K1KA08BA0047	8P CONNECTOR	
A27	K1KA04BA0047	4P CONNECTOR	
A29	K1KA03BA0047	3P CONNECTOR	
A30	K1KA04AA0104	4P CONNECTOR	
A31	K1KA03AA0104	3P CONNECTOR	
A40	K1KA08BA0086	8P CONNECTOR	
A41	K1MN16B00012	16P CONNECTOR	
A42	K1KA02AA0104	2P CONNECTOR	
A43	K1KA14BA0051	11P CONNECTOR	
A44	K1MN04B00008	4P CONNECTOR	
A45	K1MN04B00008	4P CONNECTOR	
A71	K1KA06A00454	6P CONNECTOR	
A100	K1KA06A00454	6P CONNECTOR	
B2501	BCR20V4	BATTERY HOLDER	
CF9701	D4CC1103A037	THERMISTOR	
CW1	K1KA03AA0263	3P CONNECTOR	
J1	K1MN18B00062	18P CONNECTOR	
R1	K1KA03BA0086	3P CONNECTOR	
T1	K1KA03AA0104	3P CONNECTOR	
JK2001	K2LC108B0064	TERMINAL	
JK2003	K1FB124B0026	TERMINAL	
JK3001	K1CB205B0006	TERMINAL	
JK3002	K1FB115B0103	TERNINAL CONNECTOR	
JK3003	K1QBB3AB0007	TERMINAL	
JK3004	K1QBB2AB0018	TERMINAL	
JK9801	K2HC204B0002	CONNECTOR	
JK9802	K2HC204B0002	CONNECTOR	
JK9803	K2HA408B0084	CONNECTOR	
JK9804	TJS1A7250	HEADHONE JACK	K2HC103B0093
JK9805	K1FB109B0070	CONNECTOR	
JK9806	K1FB109B0070	CONNECTOR	
RM2001	B3RAD0000100	REMOTE CONTROL RECEIVER	
RM9951	B3RAD0000100	REMOTE CONTROL RECEIVER	
SW2501	EVQPLHA15	SWITCH	
SW2502	EVQPLHA15	SWITCH	
SW2503	EVQPLHA15	SWITCH	
SW2504	EVQPLHA15	SWITCH	
SW2505	EVQPLHA15	SWITCH	
SW2506	EVQPLHA15	SWITCH	
SW2507	EVQPLHA15	SWITCH	
SW2508	EVQPLHA15	SWITCH	
SW2509	EVQPLHA15	SWITCH	
SW2510	EVQPLHA15	SWITCH	
SW2511	EVQPLHA15	SWITCH	
SW2512	EVQPLHA15	SWITCH	
X2002	H1A6605B0004	CRYSTAL	
X2003	H0J250500042	CRYSTAL	
X2501	H0J983400016	CRYSTAL	
X2502	H0J327200114	CRYSTAL	
X3000	H0J202500002	CRYSTAL	
X3002	H1A6005B0012	CRYSTAL	
	TXN/A2VKA3	CIRCUIT BOARD A	
	TXN/J1VKA3	CIRCUIT BOARD J	
	TXN/R1VKA3	CIRCUIT BOARD R	
	TXN/T1VKA3	CIRCUIT BOARD T	
	TXNCW1VKA3	CIRCUIT BOARD CW	